ECLA EUROPEAN CLASSIFICATION

C12Y ENZYMES [N1201]

Guide heading: [N1201]

C12Y101/00 **Oxidoreductases acting on the CH-OH group of donors (1.1)** [N1201]

C12Y101/01 . with NAD+ or NADP+ as acceptor (1.1.1) [N1202]
C12Y101/01001 . . Alcohol dehydrogenase (1.1.1.1) [N1202]
C12Y101/01002 . . Alcohol dehydrogenase (NADP+) (1.1.1.2), i.e. aldehyde reductase [N1202]
C12Y101/01003 . . Homoserine dehydrogenase (1.1.1.3) [N1202]
C12Y101/01004 . . R,R-butanediol dehydrogenase (1.1.1.4) [N1202]
C12Y101/01005 . . Acetoin dehydrogenase (1.1.1.5) (C12Y101/01303, C12Y101/01304 takes precedence) [N1202]
C12Y101/01006 . . Glycerol dehydrogenase (1.1.1.6) [N1202]
C12Y101/01007 . . Propanediol-phosphate dehydrogenase (1.1.1.7) [N1204]
C12Y101/01008 . . Glycerol-3-phosphate dehydrogenase (NAD+) (1.1.1.8) [N1202]
C12Y101/01009 . . D-Xylulose reductase (1.1.1.9), i.e. xylitol dehydrogenase [N1202]
C12Y101/01010 . . L-Xylulose reductase (1.1.1.10) [N1202]
C12Y101/01011 . . D-Arabinitol 4-dehydrogenase (1.1.1.11) [N1204]
C12Y101/01012 . . L-Arabinitol 4-dehydrogenase (1.1.1.12) [N1202]
C12Y101/01013 . . L-Arabinitol 2-dehydrogenase (1.1.1.13) [N1204]
C12Y101/01014 . . L-Iditol 2-dehydrogenase (1.1.1.14), i.e. sorbitol-dehydrogenase [N1202]
C12Y101/01015 . . D-iditol 2-dehydrogenase (1.1.1.15) [N1202]
C12Y101/01016 . . Galactitol 2-dehydrogenase (1.1.1.16) [N1204]
C12Y101/01017 . . Mannitol-1-phosphate 5-dehydrogenase (1.1.1.17) [N1202]
C12Y101/01018 . . Inositol 2-dehydrogenase (1.1.1.18) [N1204]
C12Y101/01019 . . Glucuronate reductase (1.1.1.19) [N1202]
C12Y101/01020 . . Glucuronolactone reductase (1.1.1.20) [N1204]
C12Y101/01021 . . Aldehyde reductase (1.1.1.21), i.e. aldose-reductase [N1202]
C12Y101/01022 . . UDP-glucose 6-dehydrogenase (1.1.1.22) [N1204]
C12Y101/01023 . . Histidinol dehydrogenase (1.1.1.23) [N1202]
C12Y101/01024 . . Quinate dehydrogenase (1.1.1.24) [N1204]
C12Y101/01025 . . Shikimate dehydrogenase (1.1.1.25) [N1204]
C12Y101/01026 . . Glyoxylate reductase (1.1.1.26) [N1202]
C12Y101/01027 . . L-Lactate dehydrogenase (1.1.1.27) [N1202]
C12Y101/01028 . . D-Lactate dehydrogenase (1.1.1.28) [N1202]
C12Y101/01029 . . Glycerate dehydrogenase (1.1.1.29) [N1204]
C12Y101/01030 . . 3-Hydroxybutyrate dehydrogenase (1.1.1.30) [N1204]
C12Y101/01031 . . 3-Hydroxyisobutyrate dehydrogenase (1.1.1.31) [N1204]

C12Y101/01032 . . Mevaldate reductase (1.1.1.32) [N1204]
C12Y101/01033 . . Mevaldate reductase (NADPH) (1.1.1.33) [N1204]
C12Y101/01034 . . Hydroxymethylglutaryl-CoA reductase (NADPH) (1.1.1.34) [N1202]
C12Y101/01035 . . 3-Hydroxyacyl-CoA dehydrogenase (1.1.1.35) [N1202]
C12Y101/01036 . . Acetoacetyl-CoA reductase (1.1.1.36) [N1202]
C12Y101/01037 . . Malate dehydrogenase (1.1.1.37) [N1202]
C12Y101/01038 . . Malate dehydrogenase (oxaloacetate-decarboxylating) (1.1.1.38) [N1204]
C12Y101/01039 . . Malate dehydrogenase (decarboxylating) (1.1.1.39) [N1204]
C12Y101/01040 . . Malate dehydrogenase (oxaloacetate-decarboxylating) (NADP+) (1.1.1.40) [N1204]
C12Y101/01041 . . Isocitrate dehydrogenase (NAD+) (1.1.1.41) [N1202]
C12Y101/01042 . . Isocitrate dehydrogenase (NADP+) (1.1.1.42) [N1202]
C12Y101/01043 . . Phosphogluconate 2-dehydrogenase (1.1.1.43) [N1204]
C12Y101/01044 . . Phosphogluconate dehydrogenase (decarboxylating) (1.1.1.44) [N1204]
C12Y101/01045 . . L-Gulonate 3-dehydrogenase (1.1.1.45) [N1204]
C12Y101/01046 . . L-Arabinose 1-dehydrogenase (1.1.1.46) [N1204]
C12Y101/01047 . . Glucose 1-dehydrogenase (1.1.1.47) [N1202]
C12Y101/01048 . . D-Galactose 1-dehydrogenase (1.1.1.48) [N1204]
C12Y101/01049 . . Glucose-6-phosphate dehydrogenase (1.1.1.49) [N1202]
C12Y101/01050 . . 3-Alpha-hydroxysteroid dehydrogenase (B-specific) (1.1.1.50) [N1204]
C12Y101/01051 . . 3(or 17)-Beta-hydroxysteroid dehydrogenase (1.1.1.51) [N1204]
C12Y101/01052 . . 3-Alpha-hydroxycholanate dehydrogenase (1.1.1.52) [N1204]
C12Y101/01053 . . 3-Alpha (or 20-beta)-hydroxysteroid dehydrogenase (1.1.1.53) [N1202]
C12Y101/01054 . . Allyl-alcohol dehydrogenase (1.1.1.54) [N1204]
C12Y101/01055 . . Lactaldehyde reductase (NADPH) (1.1.1.55) [N1202]
C12Y101/01056 . . Ribitol 2-dehydrogenase (1.1.1.56) [N1204]
C12Y101/01057 . . Fructuronate reductase (1.1.1.57) [N1204]
C12Y101/01058 . . Tagaturonate reductase (1.1.1.58) [N1204]
C12Y101/01059 . . 3-Hydroxypropionate dehydrogenase (1.1.1.59) [N1202]
C12Y101/01060 . . 2-Hydroxy-3-oxopropionate reductase (1.1.1.60) [N1204]
C12Y101/01061 . . 4-Hydroxybutyrate dehydrogenase (1.1.1.61) [N1202]
C12Y101/01062 . . Estradiol 17-beta-dehydrogenase (1.1.1.62) [N1202]
C12Y101/01063 . . Testosterone 17-beta-dehydrogenase (1.1.1.63) [N1204]
C12Y101/01064 . . Testosterone 17-beta-dehydrogenase (NADP+) (1.1.1.64) [N1204]
C12Y101/01065 . . Pyridoxine 4-dehydrogenase (1.1.1.65) [N1204]
C12Y101/01066 . . Omega-hydroxydecanoate dehydrogenase (1.1.1.66) [N1202]
C12Y101/01067 . . Mannitol 2-dehydrogenase (1.1.1.67) [N1204]
C12Y101/01069 . . Gluconate 5-dehydrogenase (1.1.1.69) [N1204]
C12Y101/01071 . . Alcohol dehydrogenase [NAD(P)+] (1.1.1.71) [N1202]
C12Y101/01072 . . Glycerol dehydrogenase (NADP+) (1.1.1.72) [N1204]
C12Y101/01073 . . Octanol dehydrogenase (1.1.1.73) [N1204]
C12Y101/01075 . . (R)-Aminopropanol dehydrogenase (1.1.1.75) [N1204]
C12Y101/01076 . . (S,S)-Butanediol dehydrogenase (1.1.1.76) [N1204]

C12Y101/01077 . . Lactaldehyde reductase (1.1.1.77) [N1202]
C12Y101/01078 . . Methylglyoxal reductase (NADH-dependent) (1.1.1.78) [N1202]
C12Y101/01079 . . Glyoxylate reductase (NADP+) (1.1.1.79) [N1204]
C12Y101/01080 . . Isopropanol dehydrogenase (NADP+) (1.1.1.80) [N1204]
C12Y101/01081 . . Hydroxypyruvate reductase (1.1.1.81) [N1204]
C12Y101/01082 . . Malate dehydrogenase (NADP+) (1.1.1.82) [N1204]
C12Y101/01083 . . D-Malate dehydrogenase (decarboxylating) (1.1.1.83) [N1204]
C12Y101/01084 . . Dimethylmalate dehydrogenase (1.1.1.84) [N1204]
C12Y101/01085 . . 3-Isopropylmalate dehydrogenase (1.1.1.85) [N1202]
C12Y101/01086 . . Ketol-acid reductoisomerase (1.1.1.86) [N1204]
C12Y101/01087 . . Homoisocitrate dehydrogenase (1.1.1.87) [N1204]
C12Y101/01088 . . Hydroxymethylglutaryl-CoA reductase (1.1.1.88) [N1202]
C12Y101/01090 . . Aryl-alcohol dehydrogenase (1.1.1.90) [N1204]
C12Y101/01091 . . Aryl-alcohol dehydrogenase (NADP+) (1.1.1.91) [N1202]
C12Y101/01092 . . Oxaloglycolate reductase (decarboxylating) (1.1.1.92) [N1204]
C12Y101/01093 . . Tartrate dehydrogenase (1.1.1.93) [N1204]
C12Y101/01094 . . Glycerol-3-phosphate dehydrogenase (NAD(P)+) (1.1.1.94) [N1204]
C12Y101/01095 . . Phosphoglycerate dehydrogenase (1.1.1.95) [N1202]
C12Y101/01096 . . Diiodophenylpyruvate reductase (1.1.1.96) [N1204]
C12Y101/01097 . . 3-Hydroxybenzyl-alcohol dehydrogenase (1.1.1.97) [N1204]
C12Y101/01098 . . (R)-2-Hydroxy-fatty-acid dehydrogenase (1.1.1.98) [N1204]
C12Y101/01099 . . (S)-2-Hydroxy-fatty-acid dehydrogenase (1.1.1.99) [N1204]
C12Y101/01100 . . 3-Oxoacyl-[acyl-carrier-protein] reductase (1.1.1.100) [N1202]
C12Y101/01101 . . Acylglycerone-phosphate reductase (1.1.1.101) [N1204]
C12Y101/01102 . . 3-Dehydrosphinganine reductase (1.1.1.102) [N1204]
C12Y101/01103 . . L-Threonine 3-dehydrogenase (1.1.1.103) [N1202]
C12Y101/01104 . . 4-Oxoproline reductase (1.1.1.104) [N1204]
C12Y101/01105 . . Retinol dehydrogenase (1.1.1.105) [N1202]
C12Y101/01106 . . Pantoate 4-dehydrogenase (1.1.1.106) [N1204]
C12Y101/01107 . . Pyridoxal 4-dehydrogenase (1.1.1.107) [N1204]
C12Y101/01108 . . Carnitine 3-dehydrogenase (1.1.1.108) [N1202]
C12Y101/01110 . . Indolelactate dehydrogenase (1.1.1.110) [N1204]
C12Y101/01111 . . 3-(Imidazol-5-yl)lactate dehydrogenase (1.1.1.111) [N1204]
C12Y101/01112 . . Indanol dehydrogenase (1.1.1.112) [N1204]
C12Y101/01113 . . L-Xylose 1-dehydrogenase (1.1.1.113) [N1204]
C12Y101/01114 . . Apiose 1-reductase (1.1.1.114) [N1204]
C12Y101/01115 . . Ribose 1-dehydrogenase (NADP+) (1.1.1.115) [N1204]
C12Y101/01116 . . D-Arabinose 1-dehydrogenase (1.1.1.116) [N1204]
C12Y101/01117 . . D-Arabinose 1-dehydrogenase (NAD(P)+) (1.1.1.117) [N1204]
C12Y101/01118 . . Glucose 1-dehydrogenase (NAD+) (1.1.1.118) [N1202]
C12Y101/01119 . . Glucose 1-dehydrogenase (NADP+) (1.1.1.119) [N1202]
C12Y101/01120 . . Galactose 1-dehydrogenase (NADP+) (1.1.1.120) [N1204]

C12Y101/01121 . . Aldose 1-dehydrogenase (1.1.1.121) [N1204]
C12Y101/01122 . . D-Threo-aldose 1-dehydrogenase (1.1.1.122) [N1204]
C12Y101/01123 . . Sorbose 5-dehydrogenase (NADP+) (1.1.1.123) [N1204]
C12Y101/01124 . . Fructose 5-dehydrogenase (NADP+) (1.1.1.124) [N1202]
C12Y101/01125 . . 2-Deoxy-D-gluconate 3-dehydrogenase (1.1.1.125) [N1204]
C12Y101/01126 . . 2-Dehydro-3-deoxy-D-gluconate 6-dehydrogenase (1.1.1.126) [N1204]
C12Y101/01127 . . 2-Dehydro-3-deoxy-D-gluconate 5-dehydrogenase (1.1.1.127) [N1204]
C12Y101/01128 . . L-Idonate 2-dehydrogenase (1.1.1.128) [N1204]
C12Y101/01129 . . L-Threonate 3-dehydrogenase (1.1.1.129) [N1204]
C12Y101/01130 . . 3-Dehydro-L-gulonate 2-dehydrogenase (1.1.1.130) [N1204]
C12Y101/01131 . . Mannuronate reductase (1.1.1.131) [N1204]
C12Y101/01132 . . GDP-mannose 6-dehydrogenase (1.1.1.132) [N1204]
C12Y101/01133 . . dTDP-4-dehydrorhamnose reductase (1.1.1.133) [N1204]
C12Y101/01134 . . dTDP-6-deoxy-L-talose 4-dehydrogenase (1.1.1.134) [N1204]
C12Y101/01135 . . GDP-6-deoxy-D-talose 4-dehydrogenase (1.1.1.135) [N1204]
C12Y101/01136 . . UDP-N-acetylglucosamine 6-dehydrogenase (1.1.1.136) [N1204]
C12Y101/01137 . . Ribitol-5-phosphate 2-dehydrogenase (1.1.1.137) [N1204]
C12Y101/01138 . . Mannitol 2-dehydrogenase (NADP+) (1.1.1.138) [N1202]
C12Y101/01140 . . Sorbitol-6-phosphate 2-dehydrogenase (1.1.1.140) [N1204]
C12Y101/01141 . . 15-Hydroxyprostaglandin dehydrogenase (NAD+) (1.1.1.141) [N1204]
C12Y101/01142 . . D-Pinitol dehydrogenase (1.1.1.142) [N1204]
C12Y101/01143 . . Sequoyitol dehydrogenase (1.1.1.143) [N1204]
C12Y101/01144 . . Perillyl-alcohol dehydrogenase (1.1.1.144) [N1204]
C12Y101/01145 . . 3-Beta-hydroxy-DELTA5-steroid dehydrogenase (1.1.1.145) [N1202]
C12Y101/01146 . . 11-Beta-hydroxysteroid dehydrogenase (1.1.1.146) [N1202]
C12Y101/01147 . . 16-Alpha-hydroxysteroid dehydrogenase (1.1.1.147) [N1202]
C12Y101/01148 . . Estradiol 17alpha-dehydrogenase (1.1.1.148) [N1202]
C12Y101/01149 . . 20-Alpha-hydroxysteroid dehydrogenase (1.1.1.149) [N1204]
C12Y101/01150 . . 21-Hydroxysteroid dehydrogenase (NAD+) (1.1.1.150) [N1204]
C12Y101/01151 . . 21-Hydroxysteroid dehydrogenase (NADP+) (1.1.1.151) [N1204]
C12Y101/01152 . . 3-Alpha-hydroxy-5-beta-androstane-17-one 3-alpha-dehydrogenase (1.1.1.152) [N1204]
C12Y101/01153 . . Sepiapterin reductase (1.1.1.153) [N1204]
C12Y101/01154 . . Ureidoglycolate dehydrogenase (1.1.1.154) [N1202]
C12Y101/01156 . . Glycerol 2-dehydrogenase (NADP+) (1.1.1.156) [N1204]
C12Y101/01157 . . 3-Hydroxybutyryl-CoA dehydrogenase (1.1.1.157) [N1202]
C12Y101/01158 . . UDP-N-acetylmuramate dehydrogenase (1.1.1.158), i.e. UDP-N-acetylenolpyruvoylglucosamine reductase [N1202]
C12Y101/01159 . . 7-Alpha-hydroxysteroid dehydrogenase (1.1.1.159) [N1204]
C12Y101/01160 . . Dihydrobunolol dehydrogenase (1.1.1.160) [N1204]
C12Y101/01161 . . Cholestanetetraol 26-dehydrogenase (1.1.1.161) [N1204]
C12Y101/01162 . . Erythrulose reductase (1.1.1.162) [N1204]
C12Y101/01163 . . Cyclopentanol dehydrogenase (1.1.1.163) [N1204]

C12Y101/01164 . . Hexadecanol dehydrogenase (1.1.1.164) [N1204]
C12Y101/01165 . . 2-Alkyn-1-ol dehydrogenase (1.1.1.165) [N1204]
C12Y101/01166 . . Hydroxycyclohexanecarboxylate dehydrogenase (1.1.1.166) [N1204]
C12Y101/01167 . . Hydroxymalonate dehydrogenase (1.1.1.167) [N1204]
C12Y101/01168 . . 2-Dehydropantolactone reductase (A-specific) (1.1.1.168) [N1204]
C12Y101/01169 . . 2-Dehydropantoate 2-reductase (1.1.1.169), i.e. ketopantoate-reductase [N1202]
C12Y101/01170 . . Sterol-4-alpha-carboxylate 3-dehydrogenase (decarboxylating) (1.1.1.170) [N1204]
C12Y101/01172 . . 2-Oxoadipate reductase (1.1.1.172) [N1204]
C12Y101/01173 . . L-Rhamnose 1-dehydrogenase (1.1.1.173) [N1204]
C12Y101/01174 . . Cyclohexane-1,2-diol dehydrogenase (1.1.1.174) [N1204]
C12Y101/01175 . . D-Xylose 1-dehydrogenase (1.1.1.175) [N1204]
C12Y101/01176 . . 12-Alpha-hydroxysteroid dehydrogenase (1.1.1.176) [N1202]
C12Y101/01177 . . Glycerol-3-phosphate 1-dehydrogenase (NADP+) (1.1.1.177) [N1204]
C12Y101/01178 . . 3-Hydroxy-2-methylbutyryl-CoA dehydrogenase (1.1.1.178) [N1204]
C12Y101/01179 . . D-Xylose 1-dehydrogenase (NADP+) (1.1.1.179) [N1204]
C12Y101/01181 . . Cholest-5-ene-3-beta,7-alpha-diol 3-beta-dehydrogenase (1.1.1.181) [N1202]
C12Y101/01182 . . Fenchol dehydrogenase (1.1.1.182) (C12Y101/01198, C12Y101/01227, C12Y101/01228 take precedence) [N1204]
C12Y101/01183 . . Geraniol dehydrogenase (1.1.1.183) [N1204]
C12Y101/01184 . . Carbonyl reductase (NADPH) (1.1.1.184) [N1202]
C12Y101/01185 . . L-Glycol dehydrogenase (1.1.1.185) [N1204]
C12Y101/01186 . . dTDP-galactose 6-dehydrogenase (1.1.1.186) [N1204]
C12Y101/01187 . . GDP-4-dehydro-D-rhamnose reductase (1.1.1.187) [N1204]
C12Y101/01188 . . Prostaglandin-F synthase (1.1.1.188) [N1202]
C12Y101/01189 . . Prostaglandin-E(2) 9-reductase (1.1.1.189) [N1204]
C12Y101/01190 . . Indole-3-acetaldehyde reductase (NADH) (1.1.1.190) [N1202]
C12Y101/01191 . . Indole-3-acetaldehyde reductase (NADPH) (1.1.1.191) [N1204]
C12Y101/01192 . . Long-chain-alcohol dehydrogenase (1.1.1.192) [N1202]
C12Y101/01193 . . 5-Amino-6-(5-phosphoribosylamino)uracil reductase (1.1.1.193) [N1204]
C12Y101/01194 . . Coniferyl-alcohol dehydrogenase (1.1.1.194) [N1204]
C12Y101/01195 . . Cinnamyl-alcohol dehydrogenase (1.1.1.195) [N1204]
C12Y101/01196 . . 15-Hydroxyprostaglandin-D dehydrogenase (NADP+) (1.1.1.196) [N1204]
C12Y101/01197 . . 15-Hydroxyprostaglandin dehydrogenase (NADP+) (1.1.1.197) [N1204]
C12Y101/01198 . . (+)-Borneol dehydrogenase (1.1.1.198) [N1204]
C12Y101/01199 . . (S)-Usnate reductase (1.1.1.199) [N1204]
C12Y101/01200 . . Aldose-6-phosphate reductase (NADPH) (1.1.1.200) [N1204]
C12Y101/01201 . . 7-Beta-hydroxysteroid dehydrogenase (NADP+) (1.1.1.201) [N1204]
C12Y101/01202 . . 1,3-Propanediol dehydrogenase (1.1.1.202) [N1202]
C12Y101/01203 . . Uronate dehydrogenase (1.1.1.203) [N1204]
C12Y101/01205 . . IMP dehydrogenase (1.1.1.205) [N1202]
C12Y101/01206 . . Tropinone reductase I (1.1.1.206) [N1204]
C12Y101/01207 . . (-)-Menthol dehydrogenase (1.1.1.207) [N1204]

C12Y101/01208 . . (+)-Neomenthol dehydrogenase (1.1.1.208) [N1204]
C12Y101/01209 . . 3(or 17)-Alpha-hydroxysteroid dehydrogenase (1.1.1.209) [N1204]
C12Y101/01210 . . 3-Beta(or 20-alpha)-hydroxysteroid dehydrogenase (1.1.1.210) [N1202]
C12Y101/01211 . . Long-chain-3-hydroxyacyl-CoA dehydrogenase (1.1.1.211) [N1204]
C12Y101/01212 . . 3-Oxoacyl-[acyl-carrier-protein reductase (NADH) (1.1.1.212) [N1204]
C12Y101/01213 . . 3-Alpha-hydroxysteroid dehydrogenase A-specific (1.1.1.213) [N1202]
C12Y101/01214 . . 2-Dehydropantolactone reductase (B-specific) (1.1.1.214) [N1204]
C12Y101/01215 . . Gluconate 2-dehydrogenase (1.1.1.215) [N1204]
C12Y101/01216 . . Farnesol dehydrogenase (1.1.1.216) [N1202]
C12Y101/01217 . . Benzyl-2-methyl-hydroxybutyrate dehydrogenase (1.1.1.217) [N1204]
C12Y101/01218 . . Morphine 6-dehydrogenase (1.1.1.218) [N1204]
C12Y101/01219 . . Dihydrokaempferol 4-reductase (1.1.1.219), i.e. dihydroflavonol-4-reductase [N1202]
C12Y101/01220 . . 6-Pyruvoyltetrahydropterin 2'-reductase (1.1.1.220) [N1204]
C12Y101/01221 . . Vomifoliol dehydrogenase (1.1.1.221) [N1204]
C12Y101/01222 . . (R)-4-Hydroxyphenyllactate dehydrogenase (1.1.1.222) [N1204]
C12Y101/01223 . . Isopiperitenol dehydrogenase (1.1.1.223) [N1204]
C12Y101/01224 . . Mannose-6-phosphate 6-reductase (1.1.1.224) [N1204]
C12Y101/01225 . . Chlordecone reductase (1.1.1.225) [N1204]
C12Y101/01226 . . 4-Hydroxycyclohexanecarboxylate dehydrogenase (1.1.1.226) [N1204]
C12Y101/01227 . . (-)-Borneol dehydrogenase (1.1.1.227) [N1204]
C12Y101/01228 . . (+)-Sabinol dehydrogenase (1.1.1.228) [N1204]
C12Y101/01229 . . Diethyl 2-methyl-3-oxosuccinate reductase (1.1.1.229) [N1204]
C12Y101/01230 . . 3-Alpha-hydroxyglycyrrhetinate dehydrogenase (1.1.1.230) [N1204]
C12Y101/01231 . . 15-Hydroxyprostaglandin-I dehydrogenase (NADP+) (1.1.1.231) [N1204]
C12Y101/01232 . . 15-Hydroxyicosatetraenoate dehydrogenase (1.1.1.232) [N1204]
C12Y101/01233 . . N-Acylmannosamine 1-dehydrogenase (1.1.1.233) [N1204]
C12Y101/01234 . . Flavanone 4-reductase (1.1.1.234) [N1204]
C12Y101/01235 . . 8-Oxocoformycin reductase (1.1.1.235) [N1204]
C12Y101/01236 . . Tropinone reductase II (1.1.1.236) [N1204]
C12Y101/01237 . . Hydroxyphenylpyruvate reductase (1.1.1.237) [N1204]
C12Y101/01238 . . 12-Beta-hydroxysteroid dehydrogenase (1.1.1.238) [N1204]
C12Y101/01239 . . 3-Alpha-(17-beta)-hydroxysteroid dehydrogenase (NAD+) (1.1.1.239) [N1204]
C12Y101/01240 . . N-Acetylhexosamine 1-dehydrogenase (1.1.1.240) [N1204]
C12Y101/01241 . . 6-Endo-hydroxycineole dehydrogenase (1.1.1.241) [N1204]
C12Y101/01243 . . Carveol dehydrogenase (1.1.1.243) [N1204]
C12Y101/01244 . . Methanol dehydrogenase (1.1.1.244) [N1204]
C12Y101/01245 . . Cyclohexanol dehydrogenase (1.1.1.245) [N1204]
C12Y101/01246 . . Pterocarpin synthase (1.1.1.246) [N1204]
C12Y101/01247 . . Codeinone reductase (NADPH) (1.1.1.247) [N1204]
C12Y101/01248 . . Salutaridine reductase (NADPH) (1.1.1.248) [N1204]
C12Y101/01250 . . D-Arabinitol 2-dehydrogenase (1.1.1.250) [N1204]

C12Y101/01251 . . Galactitol-1-phosphate 5-dehydrogenase (1.1.1.251) [N1204]
C12Y101/01252 . . Tetrahydroxynaphthalene reductase (1.1.1.252) [N1204]
C12Y101/01254 . . (S)-Carnitine 3-dehydrogenase (1.1.1.254) [N1204]
C12Y101/01255 . . Mannitol dehydrogenase (1.1.1.255) [N1204]
C12Y101/01256 . . Fluoren-9-ol dehydrogenase (1.1.1.256) [N1204]
C12Y101/01257 . . 4-(Hydroxymethyl)benzenesulfonate dehydrogenase (1.1.1.257) [N1204]
C12Y101/01258 . . 6-Hydroxyhexanoate dehydrogenase (1.1.1.258) [N1204]
C12Y101/01259 . . 3-Hydroxypimeloyl-CoA dehydrogenase (1.1.1.259) [N1204]
C12Y101/01260 . . Sulcatone reductase (1.1.1.260) [N1204]
C12Y101/01261 . . sn-Glycerol-1-phosphate dehydrogenase (1.1.1.261) [N1204]
C12Y101/01262 . . 4-Hydroxythreonine-4-phosphate dehydrogenase (1.1.1.262) [N1204]
C12Y101/01263 . . 1,5-Anhydro-D-fructose reductase (1.1.1.263) [N1204]
C12Y101/01264 . . L-Idonate 5-dehydrogenase (1.1.1.264) [N1204]
C12Y101/01265 . . 3-Methylbutanal reductase (1.1.1.265) [N1204]
C12Y101/01266 . . dTDP-4-dehydro-6-deoxyglucose reductase (1.1.1.266) [N1204]
C12Y101/01267 . . 1-Deoxy-D-xylulose-5-phosphate reductoisomerase (1.1.1.267) [N1204]
C12Y101/01268 . . 2-(R)-Hydroxypropyl-CoM dehydrogenase (1.1.1.268) [N1204]
C12Y101/01269 . . 2-(S)-Hydroxypropyl-CoM dehydrogenase (1.1.1.269) [N1204]
C12Y101/01270 . . 3-Keto-steroid reductase (1.1.1.270) [N1204]
C12Y101/01271 . . GDP-L-fucose synthase (1.1.1.271) [N1204]
C12Y101/01272 . . (R)-2-Hydroxyacid dehydrogenase (1.1.1.272) [N1204]
C12Y101/01273 . . Vellosimine dehydrogenase (1.1.1.273) [N1204]
C12Y101/01274 . . 2,5-Didehydrogluconate reductase (1.1.1.274), i.e. 2,5-diketo-D-gluconic acid reductase [N1202]
C12Y101/01275 . . (+)-Trans-carveol dehydrogenase (1.1.1.275) [N1204]
C12Y101/01276 . . Serine 3-dehydrogenase (1.1.1.276) [N1204]
C12Y101/01277 . . 3-Beta-hydroxy-5-beta-steroid dehydrogenase (1.1.1.277) [N1204]
C12Y101/01278 . . 3-Beta-hydroxy-5-alpha-steroid dehydrogenase (1.1.1.278) [N1204]
C12Y101/01279 . . (R)-3-Hydroxyacid-ester dehydrogenase (1.1.1.279) [N1204]
C12Y101/01280 . . (S)-3-Hydroxyacid-ester dehydrogenase (1.1.1.280) [N1204]
C12Y101/01281 . . GDP-4-dehydro-6-deoxy-D-mannose reductase (1.1.1.281) [N1204]
C12Y101/01282 . . Quinate/shikimate dehydrogenase (1.1.1.282) [N1204]
C12Y101/01283 . . Methylglyoxal reductase (NADPH-dependent) (1.1.1.283) [N1204]
C12Y101/01284 . . S-(hydroxymethyl)glutathione dehydrogenase (1.1.1.284), i.e. nitroreductase [N1202]
C12Y101/01285 . . 3''-Deamino-3''-oxonicotianamine reductase (1.1.1.285) [N1204]
C12Y101/01286 . . Isocitrate--homoisocitrate dehydrogenase (1.1.1.286) [N1204]
C12Y101/01287 . . D-Arabinitol dehydrogenase (NADP+) (1.1.1.287) [N1204]
C12Y101/01288 . . Xanthoxin dehydrogenase (1.1.1.288) [N1202]
C12Y101/01289 . . Sorbose reductase (1.1.1.289) [N1204]
C12Y101/01290 . . 4-Phosphoerythronate dehydrogenase (1.1.1.290) [N1204]
C12Y101/01291 . . 2-Hydroxymethylglutarate dehydrogenase (1.1.1.291) [N1204]
C12Y101/01292 . . 1,5-Anhydro-D-fructose reductase (1,5-anhydro-D-mannitol-forming) (1.1.1.292)

N1204]

C12Y101/01294 . . Chlorophyll(ide) b reductase (1.1.1.294) [N1204]
C12Y101/01295 . . Momilactone-A synthase (1.1.1.295) [N1204]
C12Y101/01296 . . Dihydrocarveol dehydrogenase (1.1.1.296) [N1204]
C12Y101/01297 . . Limonene-1,2-diol dehydrogenase (1.1.1.297) [N1204]
C12Y101/01298 . . 3-Hydroxypropionate dehydrogenase (NADP+) (1.1.1.298) [N1204]
C12Y101/01299 . . Malate dehydrogenase (NAD(P)+) (1.1.1.299) [N1204]
C12Y101/01300 . . NADP-retinol dehydrogenase (1.1.1.300) [N1202]
C12Y101/01301 . . D-Arabitol-phosphate dehydrogenase (1.1.1.301) [N1204]
C12Y101/01302 . . 2,5-Diamino-6-(ribosylamino)-4(3H)-pyrimidinone 5'-phosphate reductase (1.1.1.302) [N1204]
C12Y101/01303 . . Diacetyl reductase, [(R)-acetoin forming] (1.1.1.303) [N1202]
C12Y101/01304 . . Diacetyl reductase, (S)-acetoin forming (1.1.1.304) [N1202]
C12Y101/01305 . . UDP-glucuronic acid dehydrogenase (UDP-4-keto-hexauronic acid decarboxylating) (1.1.1.305) [N1204]
C12Y101/01306 . . S-(Hydroxymethyl)mycothiol dehydrogenase (1.1.1.306) [N1204]
C12Y101/01307 . . D-Xylose reductase (1.1.1.307) [N1204]
C12Y101/01308 . . Sulfopropanediol 3-dehydrogenase (1.1.1.308) [N1204]
C12Y101/01309 . . Phosphonoacetaldehyde reductase (NADH) (1.1.1.309) [N1204]
C12Y101/01310 . . (S)-Sulfolactate dehydrogenase (1.1.1.310) [N1204]
C12Y101/01311 . . (S)-1-Phenylethanol dehydrogenase (1.1.1.311) [N1204]
C12Y101/01312 . . 2-Hydroxy-4-carboxymuconate semialdehyde hemiacetal dehydrogenase (1.1.1.312) [N1204]
C12Y101/01313 . . Sulfoacetaldehyde reductase (1.1.1.313) [N1204]
C12Y101/01314 . . Germacrene A alcohol dehydrogenase (1.1.1.314) [N1204]
C12Y101/01315 . . 11-Cis-retinol dehydrogenase (1.1.1.315) [N1204]
C12Y101/01316 . . L-Galactose 1-dehydrogenase (1.1.1.316) [N1204]
C12Y101/01317 . . Perakine reductase (1.1.1.317) [N1204]
C12Y101/01817 . . Sulfoacetaldehyde reductasee (1.1.1.B17) [N1202]

C12Y101/02 . with a cytochrome as acceptor (1.1.2) [N1202]
C12Y101/02002 . . Mannitol dehydrogenase (cytochrome) (1.1.2.2) [N1204]
C12Y101/02003 . . L-Lactate dehydrogenase (cytochrome) (1.1.2.3) [N1202]
C12Y101/02004 . . D-lactate dehydrogenase (cytochrome) (1.1.2.4) [N1202]
C12Y101/02005 . . D-Lactate dehydrogenase (cytochrome c-553) (1.1.2.5) [N1204]
C12Y101/02006 . . Polyvinyl alcohol dehydrogenase (cytochrome) (1.1.2.6) [N1204]
C12Y101/02007 . . Methanol dehydrogenase (cytochrome c) (1.1.2.7) [N1204]
C12Y101/02008 . . Alcohol dehydrogenase (cytochrome c) (1.1.2.8) [N1204]

C12Y101/03 . with a oxygen as acceptor (1.1.3) [N1202]
C12Y101/03003 . . Malate oxidase (1.1.3.3) [N1204]
C12Y101/03004 . . Glucose oxidase (1.1.3.4) [N1202]
C12Y101/03005 . . Hexose oxidase (1.1.3.5) [N1202]
C12Y101/03006 . . Cholesterol oxidase (1.1.3.6) [N1202]

C12Y101/03007 . . Aryl-alcohol oxidase (1.1.3.7) [N1204]
C12Y101/03008 . . L-Gulonolactone oxidase (1.1.3.8) [N1204]
C12Y101/03009 . . Galactose oxidase (1.1.3.9) [N1202]
C12Y101/03010 . . Pyranose oxidase (1.1.3.10) [N1202]
C12Y101/03011 . . L-sorbose oxidase (1.1.3.11) [N1202]
C12Y101/03012 . . Pyridoxine 4-oxidase (1.1.3.12) [N1204]
C12Y101/03013 . . Alcohol oxidase (1.1.3.13) [N1202]
C12Y101/03014 . . Catechol oxidase (dimerizing) (1.1.3.14) [N1204]
C12Y101/03015 . . (S)-2-Hydroxy-acid oxidase (1.1.3.15) [N1204]
C12Y101/03016 . . Ecdysone oxidase (1.1.3.16) [N1204]
C12Y101/03017 . . Choline oxidase (1.1.3.17) [N1202]
C12Y101/03018 . . Secondary-alcohol oxidase (1.1.3.18) [N1204]
C12Y101/03019 . . 4-Hydroxymandelate oxidase (1.1.3.19) [N1204]
C12Y101/03020 . . Long-chain-alcohol oxidase (1.1.3.20) [N1204]
C12Y101/03021 . . Glycerol-3-phosphate-oxidase (1.1.3.21) [N1202]
C12Y101/03023 . . Thiamine oxidase (1.1.3.23) [N1204]
C12Y101/03027 . . Hydroxyphytanate oxidase (1.1.3.27) [N1204]
C12Y101/03028 . . Nucleoside oxidase (1.1.3.28) [N1202]
C12Y101/03029 . . N-Acylhexosamine oxidase (1.1.3.29) [N1204]
C12Y101/03030 . . Polyvinyl-alcohol oxidase (1.1.3.30) [N1204]
C12Y101/03037 . . D-Arabinono-1,4-lactone oxidase (1.1.3.37) [N1204]
C12Y101/03038 . . Vanillyl-alcohol oxidase (1.1.3.38) [N1204]
C12Y101/03039 . . Nucleoside oxidase (H2O2-forming) (1.1.3.39) [N1204]
C12Y101/03040 . . D-Mannitol oxidase (1.1.3.40) [N1204]
C12Y101/03041 . . Alditol oxidase (1.1.3.41) [N1204]
C12Y101/03042 . . Prosolanapyrone-II oxidase (1.1.3.42) [N1204]

C12Y101/04 . with a disulfide as acceptor (1.1.4) [N1202]
C12Y101/04001 . . Vitamin-K-epoxide reductase (warfarin-sensitive) (1.1.4.1) [N1204]
C12Y101/04002 . . Vitamin-K-epoxide reductase (warfarin-insensitive) (1.1.4.2) [N1204]

C12Y101/05 . with a quinone or similar compound as acceptor (1.1.5) [N1201]
C12Y101/05002 . . Quinoprotein glucose dehydrogenase (1.1.5.2) [N1202]
C12Y101/05003 . . Glycerol-3-phosphate dehydrogenase (1.1.5.3) [N1202]
C12Y101/05004 . . Malate dehydrogenase (quinone) (1.1.5.4) [N1204]
C12Y101/05005 . . Alcohol dehydrogenase (quinone) (1.1.5.5) [N1204]
C12Y101/05006 . . Formate dehydrogenase-N (1.1.5.6) [N1204]
C12Y101/05007 . . Cyclic alcohol dehydrogenase (quinone) (1.1.5.7) [N1204]
C12Y101/05008 . . Quinate dehydrogenase (quinone) (1.1.5.8) [N1204]

C12Y101/09 . with a copper protein as acceptor (1.1.9) [N1204]
C12Y101/09001 . . Alcohol dehydrogenase (azurin) (1.1.9.1) [N1204]

C12Y101/98 . with other, known, acceptors (1.1.98) [N1204]

C12Y101/98002 . . Glucose-6-phosphate dehydrogenase (coenzyme-F420) (1.1.98.2) [N1204]

C12Y101/99 . with other acceptors (1.1.99) [N1202]
C12Y101/99001 . . Choline dehydrogenase (1.1.99.1) [N1202]
C12Y101/99002 . . 2-Hydroxyglutarate dehydrogenase (1.1.99.2) [N1202]
C12Y101/99003 . . Gluconate 2-dehydrogenase (acceptor) (1.1.99.3) [N1204]
C12Y101/99004 . . Dehydrogluconate dehydrogenase (1.1.99.4) [N1204]
C12Y101/99006 . . D-2-Hydroxy-acid dehydrogenase (1.1.99.6) [N1204]
C12Y101/99007 . . Lactate--malate transhydrogenase (1.1.99.7) [N1204]
C12Y101/99008 . . Alcohol dehydrogenase (acceptor) (1.1.99.8) (C12Y101/02007, C12Y101/02008 take precedence) [N1204]
C12Y101/99009 . . Pyridoxine 5-dehydrogenase (1.1.99.9) [N1204]
C12Y101/99010 . . Glucose dehydrogenase (acceptor) (1.1.99.10) [N1202]
C12Y101/99011 . . Fructose 5-dehydrogenase (1.1.99.11) [N1202]
C12Y101/99012 . . Sorbose dehydrogenase (1.1.99.12) [N1202]
C12Y101/99013 . . Glucoside 3-dehydrogenase (1.1.99.13) [N1204]
C12Y101/99014 . . Glycolate dehydrogenase (1.1.99.14) [N1204]
C12Y101/99018 . . Cellobiose oxidase (1.1.99.18) [N1202]
C12Y101/99020 . . Alkan-1-ol dehydrogenase (acceptor) (1.1.99.20) [N1204]
C12Y101/99021 . . D-Sorbitol dehydrogenase (acceptor) (1.1.99.21) [N1202]
C12Y101/99022 . . Glycerol dehydrogenase (acceptor) (1.1.99.22) [N1204]
C12Y101/99024 . . Hydroxyacid-oxoacid transhydrogenase (1.1.99.24) [N1204]
C12Y101/99026 . . 3-Hydroxycyclohexanone dehydrogenase (1.1.99.26) [N1204]
C12Y101/99027 . . (R)-Pantolactone dehydrogenase (flavin) (1.1.99.27) [N1204]
C12Y101/99028 . . Glucose-fructose oxidoreductase (1.1.99.28) [N1202]
C12Y101/99029 . . Pyranose dehydrogenase (acceptor) (1.1.99.29) [N1204]
C12Y101/99030 . . 2-Oxo-acid reductase (1.1.99.30) [N1204]
C12Y101/99031 . . (S)-Mandelate dehydrogenase (1.1.99.31) [N1204]
C12Y101/99032 . . L-Sorbose 1-dehydrogenase (1.1.99.32) [N1204]
C12Y101/99033 . . Formate dehydrogenase (acceptor) (1.1.99.33) [N1204]
C12Y101/99035 . . Soluble quinoprotein glucose dehydrogenase (1.1.99.35) [N1204]
C12Y101/99036 . . NDMA-dependent alcohol dehydrogenase (1.1.99.36) [N1204]
C12Y101/99037 . . NDMA-dependent methanol dehydrogenase (1.1.99.37) [N1204]

C12Y102/00 Oxidoreductases acting on the aldehyde or oxo group of donors (1.2) [N1202]

C12Y102/01 . with NAD+ or NADP+ as acceptor (1.2.1) [N1202]
C12Y102/01001 . . Formaldehyde dehydrogenase (glutathione) (1.2.1.1) (C12Y101/01284, C12Y404/01022 take precedence) [N1204]
C12Y102/01002 . . Formate dehydrogenase (1.2.1.2) [N1202]
C12Y102/01003 . . Aldehyde dehydrogenase (NAD+) (1.2.1.3) [N1202]
C12Y102/01004 . . Aldehyde dehydrogenase (NADP+) (1.2.1.4) [N1202]
C12Y102/01005 . . Aldehyde dehydrogenase [NAD(P)+] (1.2.1.5) [N1202]

C12Y102/01007 . . Benzaldehyde dehydrogenase (NADP+) (1.2.1.7) [N1204]
C12Y102/01008 . . Betaine-aldehyde dehydrogenase (NADH) (1.2.1.8) [N1202]
C12Y102/01009 . . Glyceraldehyde-3-phosphate dehydrogenase (NADP+) (1.2.1.9) [N1202]
C12Y102/01010 . . Acetaldehyde dehydrogenase (acetylating) (1.2.1.10) [N1202]
C12Y102/01011 . . Aspartate-semialdehyde dehydrogenase (1.2.1.11) [N1202]
C12Y102/01012 . . Glyceraldehyde-3-phosphate dehydrogenase (phosphorylating) (1.2.1.12) [N1202]
C12Y102/01013 . . Glyceraldehyde-3-phosphate dehydrogenase (NADP+) (phosphorylating) (1.2.1.13) [N1202]
C12Y102/01015 . . Malonate-semialdehyde dehydrogenase (1.2.1.15) [N1202]
C12Y102/01016 . . Succinate-semialdehyde dehydrogenase [NAD(P)+] (1.2.1.16) [N1202]
C12Y102/01017 . . Glyoxylate dehydrogenase (acylating) (1.2.1.17) [N1204]
C12Y102/01018 . . Malonate-semialdehyde dehydrogenase (acetylating) (1.2.1.18) [N1202]
C12Y102/01019 . . Aminobutyraldehyde dehydrogenase (1.2.1.19) [N1202]
C12Y102/01020 . . Glutarate-semialdehyde dehydrogenase (1.2.1.20) [N1204]
C12Y102/01021 . . Glycolaldehyde dehydrogenase (1.2.1.21) [N1204]
C12Y102/01022 . . Lactaldehyde dehydrogenase (1.2.1.22) [N1204]
C12Y102/01023 . . 2-Oxoaldehyde dehydrogenase (NAD+) (1.2.1.23) [N1204]
C12Y102/01024 . . Succinate-semialdehyde dehydrogenase (NAD+) (1.2.1.24) [N1202]
C12Y102/01025 . . 2-Oxoisovalerate dehydrogenase (acylating) (1.2.1.25) [N1204]
C12Y102/01026 . . 2,5-Dioxovalerate dehydrogenase (1.2.1.26) [N1204]
C12Y102/01027 . . Methylmalonate-semialdehyde dehydrogenase (acylating) (1.2.1.27) [N1204]
C12Y102/01028 . . Benzaldehyde dehydrogenase (NAD+) (1.2.1.28) [N1204]
C12Y102/01029 . . Aryl-aldehyde dehydrogenase (1.2.1.29) [N1204]
C12Y102/01030 . . Aryl-aldehyde dehydrogenase (NADP+) (1.2.1.30) [N1204]
C12Y102/01031 . . L-Aminoadipate-semialdehyde dehydrogenase (1.2.1.31), i.e. alpha-aminoadipate reductase [N1202]
C12Y102/01032 . . Aminomuconate-semialdehyde dehydrogenase (1.2.1.32) [N1204]
C12Y102/01033 . . (R)-Dehydropantoate dehydrogenase (1.2.1.33) [N1204]
C12Y102/01036 . . Retinal dehydrogenase (1.2.1.36) [N1202]
C12Y102/01038 . . N-Acetyl-gamma-glutamyl-phosphate reductase (1.2.1.38) [N1204]
C12Y102/01039 . . Phenylacetaldehyde dehydrogenase (1.2.1.39) [N1204]
C12Y102/01040 . . 3-Alpha,7-alpha,12-alpha-trihydroxycholestan-26-al 26-oxidoreductase (1.2.1.40) [N1204]
C12Y102/01041 . . Glutamate-5-semialdehyde dehydrogenase (1.2.1.41) [N1204]
C12Y102/01042 . . Hexadecanal dehydrogenase (acylating) (1.2.1.42), i.e. fatty acyl-CoA reductase [N1202]
C12Y102/01043 . . Formate dehydrogenase (NADP+) (1.2.1.43) [N1202]
C12Y102/01044 . . Cinnamoyl-CoA reductase (1.2.1.44) [N1204]
C12Y102/01046 . . Formaldehyde dehydrogenase (1.2.1.46) [N1204]
C12Y102/01047 . . 4-Trimethylammoniobutyraldehyde dehydrogenase (1.2.1.47) [N1204]
C12Y102/01048 . . Long-chain-aldehyde dehydrogenase (1.2.1.48) [N1204]
C12Y102/01049 . . 2-Oxoaldehyde dehydrogenase (NADP+) (1.2.1.49) [N1204]
C12Y102/01050 . . Long-chain-fatty-acyl-CoA reductase (1.2.1.50) [N1204]

C12Y102/01051 . . Pyruvate dehydrogenase (NADP+) (1.2.1.51) [N1202]
C12Y102/01052 . . Oxoglutarate dehydrogenase (NADP+) (1.2.1.52) [N1204]
C12Y102/01053 . . 4-Hydroxyphenylacetaldehyde dehydrogenase (1.2.1.53) [N1204]
C12Y102/01054 . . Gamma-guanidinobutyraldehyde dehydrogenase (1.2.1.54) [N1204]
C12Y102/01057 . . Butanal dehydrogenase (1.2.1.57) [N1204]
C12Y102/01058 . . Phenylglyoxylate dehydrogenase (acylating) (1.2.1.58) [N1204]
C12Y102/01059 . . Glyceraldehyde-3-phosphate dehydrogenase (NAD(P)+) (phosphorylating) (1.2.1.59) [N1204]
C12Y102/01060 . . 5-Carboxymethyl-2-hydroxymuconic-semialdehyde dehydrogenase (1.2.1.60) [N1204]
C12Y102/01061 . . 4-Hydroxymuconic-semialdehyde dehydrogenase (1.2.1.61) [N1204]
C12Y102/01062 . . 4-Formylbenzenesulfonate dehydrogenase (1.2.1.62) [N1204]
C12Y102/01063 . . 6-Oxohexanoate dehydrogenase (1.2.1.63) [N1204]
C12Y102/01064 . . 4-Hydroxybenzaldehyde dehydrogenase (1.2.1.64) [N1204]
C12Y102/01065 . . Salicylaldehyde dehydrogenase (1.2.1.65) [N1204]
C12Y102/01067 . . Vanillin dehydrogenase (1.2.1.67) [N1204]
C12Y102/01068 . . Coniferyl-aldehyde dehydrogenase (1.2.1.68) [N1204]
C12Y102/01069 . . Fluoroacetaldehyde dehydrogenase (1.2.1.69) [N1204]
C12Y102/01070 . . Glutamyl-tRNA reductase (1.2.1.70) [N1202]
C12Y102/01071 . . Succinylglutamate-semialdehyde dehydrogenase (1.2.1.71) [N1204]
C12Y102/01072 . . Erythrose-4-phosphate dehydrogenase (1.2.1.72) [N1204]
C12Y102/01073 . . Sulfoacetaldehyde dehydrogenase (1.2.1.73) [N1204]
C12Y102/01074 . . Abietadienal dehydrogenase (1.2.1.74) [N1204]
C12Y102/01075 . . Malonyl CoA reductase (malonate semialdehyde-forming) (1.2.1.75) [N1204]
C12Y102/01076 . . Succinate-semialdehyde dehydrogenase (acetylating) (1.2.1.76) [N1204]
C12Y102/01077 . . 3,4-Dehydroadipyl-CoA semialdehyde dehydrogenase (NADP+) (1.2.1.77) [N1204]
C12Y102/01078 . . 2-Formylbenzoate dehydrogenase (1.2.1.78) [N1204]
C12Y102/01079 . . Succinate-semialdehyde dehydrogenase (NADP+) (1.2.1.79) [N1204]
C12Y102/01080 . . Long-chain acyl-[acyl-carrier-protein reductase (1.2.1.80) [N1204]
C12Y102/01081 . . Sulfoacetaldehyde dehydrogenase (acylating) (1.2.1.81) [N1204]
C12Y102/01082 . . Beta-apo-4'-carotenal oxygenase (1.2.1.82) [N1204]

C12Y102/02 . with a cytochrome as acceptor (1.2.2) [N1202]
C12Y102/02001 . . Formate dehydrogenase (cytochrome) (1.2.2.1) [N1202]
C12Y102/02003 . . Formate dehydrogenase (cytochrome c-553) (1.2.2.3) [N1204]
C12Y102/02004 . . Carbon-monoxide dehydrogenase (cytochrome b-561) (1.2.2.4) [N1202]

C12Y102/03 . with oxygen as acceptor (1.2.3) [N1202]
C12Y102/03001 . . Aldehyde oxidase (1.2.3.1) [N1202]
C12Y102/03003 . . Pyruvate oxidase (1.2.3.3) [N1202]
C12Y102/03004 . . Oxalate oxidase (1.2.3.4) [N1202]
C12Y102/03005 . . Glyoxylate oxidase (1.2.3.5) [N1204]
C12Y102/03006 . . Pyruvate oxidase (CoA-acetylating) (1.2.3.6) [N1204]

C12Y102/03007 . . Indole-3-acetaldehyde oxidase (1.2.3.7) [N1204]
C12Y102/03008 . . Pyridoxal oxidase (1.2.3.8) [N1204]
C12Y102/03009 . . Aryl-aldehyde oxidase (1.2.3.9) [N1202]
C12Y102/03011 . . Retinal oxidase (1.2.3.11) [N1204]
C12Y102/03013 . . 4-Hydroxyphenylpyruvate oxidase (1.2.3.13) [N1204]
C12Y102/03014 . . Abscisic-aldehyde oxidase (1.2.3.14) [N1204]

C12Y102/04 . with a disulfide as acceptor (1.2.4) [N1202]
C12Y102/04001 . . Pyruvate dehydrogenase (acetyl-transferring) (1.2.4.1) [N1202]
C12Y102/04002 . . Oxoglutarate dehydrogenase (succinyl-transferring) (1.2.4.2), i.e. alpha-ketoglutarat dehydrogenase [N1202]
C12Y102/04004 . . 3-Methyl-2-oxobutanoate dehydrogenase (2-methylpropanoyl-transferring) (1.2.4.4), i.e. branched-chain-alpha-ketoacid dehydrogenase [N1202]

C12Y102/05 . with a quinone or similar compound as acceptor (1.2.5) [N1202]
C12Y102/05001 . . Pyruvate dehydrogenase (quinone) (1.2.5.1) [N1202]

C12Y102/07 . with an iron-sulfur protein as acceptor (1.2.7) [N1202]
C12Y102/07001 . . Pyruvate synthase (1.2.7.1), i.e. pyruvate ferredoxin oxidoreductase [N1202]
C12Y102/07002 . . 2-Oxobutyrate synthase (1.2.7.2) [N1204]
C12Y102/07003 . . 2-Oxoglutarate synthase (1.2.7.3) [N1204]
C12Y102/07004 . . Carbon-monoxide dehydrogenase (ferredoxin) (1.2.7.4) [N1204]
C12Y102/07005 . . Aldehyde ferredoxin oxidoreductase (1.2.7.5) [N1204]
C12Y102/07006 . . Glyceraldehyde-3-phosphate dehydrogenase (ferredoxin) (1.2.7.6) [N1204]
C12Y102/07007 . . 3-Methyl-2-oxobutanoate dehydrogenase (ferredoxin) (1.2.7.7) [N1204]
C12Y102/07008 . . Indolepyruvate ferredoxin oxidoreductase (1.2.7.8) [N1204]
C12Y102/07010 . . Oxalate oxidoreductase (1.2.7.10) [N1204]

C12Y102/99 . with other acceptors (1.2.99) [N1202]
C12Y102/99002 . . Carbon-monoxide dehydrogenase (acceptor) (1.2.99.2) [N1202]
C12Y102/99003 . . Aldehyde dehydrogenase (pyrroloquinoline-quinone) (1.2.99.3) [N1202]
C12Y102/99004 . . Formaldehyde dismutase (1.2.99.4) [N1204]
C12Y102/99005 . . Formylmethanofuran dehydrogenase (1.2.99.5) [N1204]
C12Y102/99006 . . Carboxylate reductase (1.2.99.6) [N1204]
C12Y102/99007 . . Aldehyde dehydrogenase (FAD-independent) (1.2.99.7) [N1202]

C12Y103/00 Oxidoreductases acting on the CH-CH group of donors (1.3) [N1202]

C12Y103/01 . with NAD+ or NADP+ as acceptor (1.3.1) [N1202]
C12Y103/01001 . . Dihydropyrimidine dehydrogenase (NAD+) (1.3.1.1) [N1204]
C12Y103/01002 . . Dihydropyrimidine dehydrogenase (NADP+) (1.3.1.2) [N1202]
C12Y103/01003 . . DELTA4-3-oxosteroid 5-beta-reductase (1.3.1.3) [N1204]
C12Y103/01004 . . Cortisone alpha-reductase (1.3.1.4) [N1204]
C12Y103/01005 . . Cucurbitacin DELTA23-reductase (1.3.1.5) [N1204]

C12Y103/01006 . . Fumarate reductase (NADH) (1.3.1.6) [N1204]
C12Y103/01007 . . Meso-tartrate dehydrogenase (1.3.1.7) [N1204]
C12Y103/01008 . . Acyl-CoA dehydrogenase (NADP+) (1.3.1.8) [N1204]
C12Y103/01009 . . Enoyl-[acyl-carrier-protein] reductase (NADH) (1.3.1.9) [N1202]
C12Y103/01010 . . Enoyl-[acyl-carrier-protein] reductase (NADPH, B-specific) (1.3.1.10) [N1202]
C12Y103/01011 . . 2-Coumarate reductase (1.3.1.11) [N1202]
C12Y103/01012 . . Prephenate dehydrogenase (1.3.1.12) [N1202]
C12Y103/01013 . . Prephenate dehydrogenase (NADP+) (1.3.1.13) [N1202]
C12Y103/01014 . . Dihydroorotate dehydrogenase (NAD+) (1.3.1.14) [N1204]
C12Y103/01015 . . Dihydroorotate dehydrogenase (NADP+) (1.3.1.15) [N1204]
C12Y103/01016 . . Beta-nitroacrylate reductase (1.3.1.16) [N1204]
C12Y103/01017 . . 3-Methyleneoxindole reductase (1.3.1.17) [N1204]
C12Y103/01018 . . Kynurenate-7,8-dihydrodiol dehydrogenase (1.3.1.18) [N1204]
C12Y103/01019 . . Cis-1,2-dihydrobenzene-1,2-diol dehydrogenase (1.3.1.19) [N1204]
C12Y103/01020 . . Trans-1,2-dihydrobenzene-1,2-diol dehydrogenase (1.3.1.20) [N1204]
C12Y103/01021 . . 7-Dehydrocholesterol reductase (1.3.1.21) [N1202]
C12Y103/01022 . . Cholestenone 5-alpha-reductase (1.3.1.22) [N1204]
C12Y103/01024 . . Biliverdin reductase (1.3.1.24) [N1202]
C12Y103/01025 . . 1,6-Dihydroxycyclohexa-2,4-diene-1-carboxylate dehydrogenase (1.3.1.25) [N1204]
C12Y103/01026 . . Dihydrodipicolinate reductase (1.3.1.26) [N1202]
C12Y103/01027 . . 2-Hexadecenal reductase (1.3.1.27) [N1204]
C12Y103/01028 . . 2,3-Dihydro-2,3-dihydroxybenzoate dehydrogenase (1.3.1.28) [N1204]
C12Y103/01029 . . Cis-1,2-dihydro-1,2-dihydroxynaphthalene dehydrogenase (1.3.1.29) [N1204]
C12Y103/01030 . . Progesterone 5-alpha-reductase (1.3.1.30), i.e. steroid-5-alpha-reductase [N1202]
C12Y103/01031 . . 2-Enoate reductase (1.3.1.31) [N1202]
C12Y103/01032 . . Maleylacetate reductase (1.3.1.32) [N1204]
C12Y103/01033 . . Protochlorophyllide reductase (1.3.1.33) [N1204]
C12Y103/01034 . . 2,4-dienoyl-CoA reductase (NADPH) (1.3.1.34) [N1202]
C12Y103/01035 . . Phosphatidylcholine desaturase (1.3.1.35) [N1202]
C12Y103/01036 . . Geissoschizine dehydrogenase (1.3.1.36) [N1204]
C12Y103/01037 . . Cis-2-enoyl-CoA reductase (NADPH) (1.3.1.37) [N1204]
C12Y103/01038 . . Trans-2-enoyl-CoA reductase (NADPH) (1.3.1.38) [N1204]
C12Y103/01039 . . Enoyl-[acyl-carrier-protein reductase (NADPH, A-specific) (1.3.1.39) [N1204]
C12Y103/01040 . . 2-Hydroxy-6-oxo-6-phenylhexa-2,4-dienoate reductase (1.3.1.40) [N1204]
C12Y103/01041 . . Xanthommatin reductase (1.3.1.41) [N1204]
C12Y103/01042 . . 12-Oxophytodienoate reductase (1.3.1.42), i.e. morphinone-reductase [N1202]
C12Y103/01043 . . Arogenate dehydrogenase (1.3.1.43) [N1204]
C12Y103/01044 . . Trans-2-enoyl-CoA reductase (NAD+) (1.3.1.44) [N1204]
C12Y103/01045 . . 2'-Hydroxyisoflavone reductase (1.3.1.45) [N1204]
C12Y103/01046 . . Biochanin-A reductase (1.3.1.46) [N1204]
C12Y103/01047 . . Alpha-santonin 1,2-reductase (1.3.1.47) [N1204]

C12Y103/01048 . . 15-Oxoprostaglandin 13-oxidase (1.3.1.48) [N1204]
C12Y103/01049 . . Cis-3,4-dihydrophenanthrene-3,4-diol dehydrogenase (1.3.1.49) [N1204]
C12Y103/01051 . . 2'-Hydroxydaidzein reductase (1.3.1.51) [N1204]
C12Y103/01052 . . 2-Methyl-branched-chain-enoyl-CoA reductase (1.3.1.52) [N1204]
C12Y103/01053 . . (3S,4R)-3,4-dihydroxycyclohexa-1,5-diene-1,4-dicarboxylate dehydrogenase (1.3.1.53) [N1204]
C12Y103/01054 . . Precorrin-6A reductase (1.3.1.54) [N1204]
C12Y103/01056 . . Cis-2,3-dihydrobiphenyl-2,3-diol dehydrogenase (1.3.1.56) [N1204]
C12Y103/01057 . . Phloroglucinol reductase (1.3.1.57) [N1202]
C12Y103/01058 . . 2,3-Dihydroxy-2,3-dihydro-p-cumate dehydrogenase (1.3.1.58) [N1204]
C12Y103/01060 . . Dibenzothiophene dihydrodiol dehydrogenase (1.3.1.60) [N1204]
C12Y103/01062 . . Pimeloyl-CoA dehydrogenase (1.3.1.62) [N1204]
C12Y103/01063 . . 2,4-Dichlorobenzoyl-CoA reductase (1.3.1.63) [N1204]
C12Y103/01064 . . Phthalate 4,5-cis-dihydrodiol dehydrogenase (1.3.1.64) [N1204]
C12Y103/01065 . . 5,6-Dihydroxy-3-methyl-2-oxo-1,2,5,6-tetrahydroquinoline dehydrogenase (1.3.1.65) [N1204]
C12Y103/01066 . . Cis-dihydroethylcatechol dehydrogenase (1.3.1.66) [N1204]
C12Y103/01067 . . Cis-1,2-dihydroxy-4-methylcyclohexa-3,5-diene-1-carboxylate dehydrogenase (1.3.1.67) [N1204]
C12Y103/01068 . . 1,2-Dihydroxy-6-methylcyclohexa-3,5-dienecarboxylate dehydrogenase (1.3.1.68) [N1204]
C12Y103/01069 . . Zeatin reductase (1.3.1.69) [N1204]
C12Y103/01070 . . DELTA14-sterol reductase (1.3.1.70) [N1202]
C12Y103/01071 . . DELTA24(24(1))-sterol reductase (1.3.1.71) [N1204]
C12Y103/01072 . . DELTA24-sterol reductase (1.3.1.72) [N1204]
C12Y103/01073 . . 1,2-Dihydrovomilenine reductase (1.3.1.73) [N1204]
C12Y103/01074 . . 2-Alkenal reductase (1.3.1.74) [N1204]
C12Y103/01075 . . Divinyl chlorophyllide a 8-vinyl-reductase (1.3.1.75) [N1204]
C12Y103/01076 . . Precorrin-2 dehydrogenase (1.3.1.76) [N1204]
C12Y103/01077 . . Anthocyanidin reductase (1.3.1.77) [N1204]
C12Y103/01078 . . Arogenate dehydrogenase (NADP+) (1.3.1.78) [N1204]
C12Y103/01079 . . Arogenate dehydrogenase (NAD(P)+) (1.3.1.79) [N1204]
C12Y103/01080 . . Red chlorophyll catabolite reductase (1.3.1.80) [N1204]
C12Y103/01081 . . (+)-Pulegone reductase (1.3.1.81) [N1204]
C12Y103/01082 . . (-)-Isopiperitenone reductase (1.3.1.82) [N1204]
C12Y103/01083 . . Geranylgeranyl diphosphate reductase (1.3.1.83) [N1204]
C12Y103/01084 . . Acrylyl-CoA reductase (NADPH) (1.3.1.84) [N1204]
C12Y103/01085 . . Crotonyl-CoA carboxylase/reductase (1.3.1.85) [N1204]
C12Y103/01086 . . Crotonyl-CoA reductase (1.3.1.86) [N1204]
C12Y103/01087 . . 3-(Cis-5,6-dihydroxycyclohexa-1,3-dien-1-yl)propanoate dehydrogenase (1.3.1.87) [N1204]
C12Y103/01088 . . tRNA-dihydrouridine16/17 synthase (NAD(P)+) (1.3.1.88) [N1204]
C12Y103/01089 . . tRNA-dihydrouridine47 synthase (NAD(P)+) (1.3.1.89) [N1204]
C12Y103/01090 . . tRNA-dihydrouridine20a/20b synthase (NAD(P)+) (1.3.1.90) [N1204]

C12Y103/01091 . . tRNA-dihydrouridine20 synthase (NAD(P)+) (1.3.1.91) [N1204]

C12Y103/02 . with a cytochrome as acceptor (1.3.2) [N1204]
C12Y103/02003 . . L-Galactonolactone dehydrogenase (1.3.2.3) [N1204]

C12Y103/03 . with oxygen as acceptor (1.3.3) [N1202]
C12Y103/03003 . . Coproporphyrinogen oxidase (1.3.3.3) [N1202]
C12Y103/03004 . . Protoporphyrinogen oxidase (1.3.3.4) [N1202]
C12Y103/03005 . . Bilirubin oxidase (1.3.3.5) [N1202]
C12Y103/03006 . . Acyl-CoA oxidase (1.3.3.6) [N1202]
C12Y103/03007 . . Dihydrouracil oxidase (1.3.3.7) [N1204]
C12Y103/03008 . . Tetrahydroberberine oxidase (1.3.3.8) [N1202]
C12Y103/03009 . . Secologanin synthase (1.3.3.9) [N1204]
C12Y103/03010 . . Tryptophan alpha,beta-oxidase (1.3.3.10) [N1204]
C12Y103/03011 . . Pyrroloquinoline-quinone synthase (1.3.3.11) [N1204]
C12Y103/03012 . . L-Galactonolactone oxidase (1.3.3.12) [N1204]

C12Y103/05 . with a quinone or related compound as acceptor (1.3.5) [N1202]
C12Y103/05001 . . Succinate dehydrogenase (ubiquinone) (1.3.5.1) [N1202]
C12Y103/05002 . . Dihydroorotate dehydrogenase (1.3.5.2) [N1202]
C12Y103/05003 . . Protoporphyrinogen IX dehydrogenase (menaquinone) (1.3.5.3) [N1204]
C12Y103/05004 . . Fumarate reductase (menaquinone) (1.3.5.4) [N1204]
C12Y103/05005 . . 15-Cis-phytoene desaturase (1.3.5.5) [N1202]
C12Y103/05006 . . 9,9'-Di-cis-zeta-carotene desaturase (1.3.5.6) [N1204]

C12Y103/07 . with an iron-sulfur protein as acceptor (1.3.7) [N1204]
C12Y103/07001 . . 6-Hydroxynicotinate reductase (1.3.7.1) [N1204]
C12Y103/07002 . . 15,16-Dihydrobiliverdin:ferredoxin oxidoreductase (1.3.7.2) [N1204]
C12Y103/07003 . . Phycoerythrobilin:ferredoxin oxidoreductase (1.3.7.3) [N1204]
C12Y103/07004 . . Phytochromobilin:ferredoxin oxidoreductase (1.3.7.4) [N1204]
C12Y103/07005 . . Phycocyanobilin:ferredoxin oxidoreductase (1.3.7.5) [N1204]
C12Y103/07006 . . Phycoerythrobilin synthase (1.3.7.6) [N1204]
C12Y103/07007 . . Ferredoxin:protochlorophyllide reductase (ATP-dependent) (1.3.7.7) [N1204]
C12Y103/07008 . . Benzoyl-CoA reductase (1.3.7.8) [N1204]
C12Y103/07009 . . 4-Hydroxybenzoyl-CoA reductase (1.3.7.9) [N1204]

C12Y103/08 . with flavin as acceptor (1.3.8) [N1204]
C12Y103/08001 . . Butyryl-CoA dehydrogenase (1.3.8.1), i.e. short chain acyl-CoA dehydrogenase [N1204]
C12Y103/08002 . . 4,4'-Diapophytoene desaturase (1.3.8.2) [N1204]

C12Y103/98 . with other, known, acceptors (1.3.98) [N1204]
C12Y103/98001 . . Dihydroorotate oxidase (fumarate) (1.3.98.1) [N1204]

C12Y103/99 . with other acceptors (1.3.99) [N1202]

C12Y103/99001 . . Succinate dehydrogenase (1.3.99.1) [N1202]
C12Y103/99002 . . Butyryl-CoA dehydrogenase (1.3.99.2), i.e. short chain acyl-CoA dehydrogenase [N1202]
C12Y103/99003 . . Acyl-CoA dehydrogenase (1.3.99.3) [N1202]
C12Y103/99004 . . 3-Oxosteroid 1-dehydrogenase (1.3.99.4) [N1202]
C12Y103/99005 . . 3-Oxo-5-alpha-steroid 4-dehydrogenase (1.3.99.5), i.e. steroid-5-alpha-reductase [N1202]
C12Y103/99006 . . 3-Oxo-5-beta-steroid 4-dehydrogenase (1.3.99.6) [N1204]
C12Y103/99007 . . Glutaryl-CoA dehydrogenase (1.3.99.7) [N1204]
C12Y103/99008 . . 2-Furoyl-CoA dehydrogenase (1.3.99.8) [N1204]
C12Y103/99010 . . Isovaleryl-CoA dehydrogenase (1.3.99.10) [N1204]
C12Y103/99012 . . 2-Methylacyl-CoA dehydrogenase (1.3.99.12) [N1204]
C12Y103/99013 . . Long-chain-acyl-CoA dehydrogenase (1.3.99.13) [N1204]
C12Y103/99014 . . Cyclohexanone dehydrogenase (1.3.99.14) [N1204]
C12Y103/99016 . . Isoquinoline 1-oxidoreductase (1.3.99.16) [N1204]
C12Y103/99017 . . Quinoline 2-oxidoreductase (1.3.99.17) [N1204]
C12Y103/99018 . . Quinaldate 4-oxidoreductase (1.3.99.18) [N1204]
C12Y103/99019 . . Quinoline-4-carboxylate 2-oxidoreductase (1.3.99.19) [N1204]
C12Y103/99021 . . (R)-Benzylsuccinyl-CoA dehydrogenase (1.3.99.21) [N1204]
C12Y103/99022 . . Coproporphyrinogen dehydrogenase (1.3.99.22) [N1204]
C12Y103/99023 . . All-trans-retinol 13,14-reductase (1.3.99.23) [N1204]
C12Y103/99024 . . 2-Amino-4-deoxychorismate dehydrogenase (1.3.99.24) [N1204]
C12Y103/99025 . . Carvone reductase (1.3.99.25) [N1204]
C12Y103/99026 . . All-trans-zeta-carotene desaturase (1.3.99.26) [N1204]
C12Y103/99027 . . 1-Hydroxycarotenoid 3,4-desaturase (1.3.99.27) [N1204]
C12Y103/99028 . . Phytoene desaturase (neurosporene-forming) (1.3.99.28) [N1202]
C12Y103/99029 . . Phytoene desaturase (zeta-carotene-forming) (1.3.99.29) [N1202]
C12Y103/99030 . . Phytoene desaturase (3,4-didehydrolycopene-forming) (1.3.99.30) [N1202]
C12Y103/99031 . . Phytoene desaturase (lycopene-forming) (1.3.99.31) [N1202]

C12Y104/00 Oxidoreductases acting on the CH-NH2 group of donors (1.4) [N1202]

C12Y104/01 . with NAD+ or NADP+ as acceptor (1.4.1) [N1202]
C12Y104/01001 . . Alanine dehydrogenase (1.4.1.1) [N1202]
C12Y104/01002 . . Glutamate dehydrogenase (1.4.1.2) [N1202]
C12Y104/01003 . . Glutamate dehydrogenase (NAD(P)+) (1.4.1.3) [N1204]
C12Y104/01004 . . Glutamate dehydrogenase (NADP+) (1.4.1.4) [N1202]
C12Y104/01005 . . L-Amino-acid dehydrogenase (1.4.1.5) [N1204]
C12Y104/01007 . . Serine 2-dehydrogenase (1.4.1.7) [N1204]
C12Y104/01008 . . Valine dehydrogenase (NADP+) (1.4.1.8) [N1204]
C12Y104/01009 . . Leucine dehydrogenase (1.4.1.9) [N1202]
C12Y104/01010 . . Glycine dehydrogenase (1.4.1.10) [N1202]
C12Y104/01011 . . L-Erythro-3,5-diaminohexanoate dehydrogenase (1.4.1.11) [N1204]

C12Y104/01012 . . 2,4-Diaminopentanoate dehydrogenase (1.4.1.12) [N1204]
C12Y104/01013 . . Glutamate synthase (NADPH) (1.4.1.13) [N1204]
C12Y104/01014 . . Glutamate synthase (NADH) (1.4.1.14) [N1204]
C12Y104/01015 . . Lysine dehydrogenase (1.4.1.15) [N1204]
C12Y104/01016 . . Diaminopimelate dehydrogenase (1.4.1.16) [N1202]
C12Y104/01017 . . N-Methylalanine dehydrogenase (1.4.1.17) [N1204]
C12Y104/01018 . . Lysine 6-dehydrogenase (1.4.1.18) [N1204]
C12Y104/01019 . . Tryptophan dehydrogenase (1.4.1.19) [N1202]
C12Y104/01020 . . Phenylalanine dehydrogenase (1.4.1.20) [N1202]
C12Y104/01021 . . Aspartate dehydrogenase (1.4.1.21) [N1204]

C12Y104/02 . with a cytochrome as acceptor (1.4.2) [N1204]
C12Y104/02001 . . Glycine dehydrogenase (cytochrome) (1.4.2.1) [N1204]

C12Y104/03 . with oxygen as acceptor (1.4.3) [N1202]
C12Y104/03001 . . D-Aspartate oxidase (1.4.3.1) [N1204]
C12Y104/03002 . . L-Amino-acid oxidase (1.4.3.2) [N1202]
C12Y104/03003 . . D-Amino-acid oxidase (1.4.3.3) [N1202]
C12Y104/03004 . . Monoamine oxidase (1.4.3.4) [N1202]
C12Y104/03005 . . Pyridoxal 5'-phosphate synthase (1.4.3.5), i.e. pyridoxamine 5-phosphate oxidase [N1202]
C12Y104/03006 . . Amine oxidase (copper-containing) (1.4.3.6) (C12Y104/03021 or C12Y104/03022 takes precedence) [N1202]
C12Y104/03007 . . D-Glutamate oxidase (1.4.3.7) [N1204]
C12Y104/03008 . . Ethanolamine oxidase (1.4.3.8) [N1204]
C12Y104/03010 . . Putrescine oxidase (1.4.3.10) [N1202]
C12Y104/03011 . . L-Glutamate oxidase (1.4.3.11) [N1202]
C12Y104/03012 . . Cyclohexylamine oxidase (1.4.3.12) [N1204]
C12Y104/03013 . . Protein-lysine 6-oxidase (1.4.3.13), i.e. lysyl-oxidase [N1202]
C12Y104/03014 . . L-Lysine oxidase (1.4.3.14) [N1204]
C12Y104/03015 . . D-Glutamate(D-aspartate) oxidase (1.4.3.15) [N1204]
C12Y104/03016 . . L-Aspartate oxidase (1.4.3.16) [N1204]
C12Y104/03019 . . Glycine oxidase (1.4.3.19) [N1204]
C12Y104/03020 . . L-Lysine 6-oxidase (1.4.3.20) [N1204]
C12Y104/03021 . . Primary-amine oxidase (1.4.3.21), i.e VAP-1 [N1202]
C12Y104/03022 . . Diamine oxidase (1.4.3.22) [N1202]
C12Y104/03023 . . 7-Chloro-L-tryptophan oxidase (1.4.3.23) [N1204]

C12Y104/04 . with a disulfide as acceptor (1.4.4) [N1204]
C12Y104/04002 . . Glycine dehydrogenase (decarboxylating) (1.4.4.2) [N1204]

C12Y104/05 . with a quinone or similar compound as acceptor (1.4.5) [N1204]
C12Y104/05001 . . D-Amino acid dehydrogenase (quinone) (1.4.5.1) [N1204]

C12Y104/07 . with an iron-sulfur protein as acceptor (1.4.7) [N1204]

C12Y104/07001 . . Glutamate synthase (ferredoxin) (1.4.7.1) [N1204]

C12Y104/09 . with a copper protein as acceptor (1.4.9) [N1204]
C12Y104/09001 . . Methylamine dehydrogenase (amicyanin) (1.4.9.1) [N1204]
C12Y104/09002 . . Aralkylamine dehydrogenase (azurin) (1.4.9.2) [N1204]

C12Y104/98 . with other, known, acceptors (1.4.98) [N1204]

C12Y104/99 . with other acceptors (1.4.99) [N1202]
C12Y104/99001 . . D-Amino-acid dehydrogenase (1.4.99.1) [N1204]
C12Y104/99002 . . Taurine dehydrogenase (1.4.99.2) [N1204]
C12Y104/99003 . . Amine dehydrogenase (1.4.99.3) [N1202]
C12Y104/99005 . . Glycine dehydrogenase (cyanide-forming) (1.4.99.5) [N1204]

C12Y105/00 Oxidoreductases acting on the CH-NH group of donors (1.5) [N1202]

C12Y105/01 . with NAD+ or NADP+ as acceptor (1.5.1) [N1202]
C12Y105/01001 . . Pyrroline-2-carboxylate reductase (1.5.1.1) [N1204]
C12Y105/01002 . . Pyrroline-5-carboxylate reductase (1.5.1.2) [N1202]
C12Y105/01003 . . Dihydrofolate reductase (1.5.1.3) [N1202]
C12Y105/01005 . . Methylenetetrahydrofolate dehydrogenase (NADP+) (1.5.1.5) [N1204]
C12Y105/01006 . . Formyltetrahydrofolate dehydrogenase (1.5.1.6) [N1204]
C12Y105/01007 . . Saccharopine dehydrogenase (NAD+, L-lysine-forming) (1.5.1.7) [N1204]
C12Y105/01008 . . Saccharopine dehydrogenase (NADP+, L-lysine-forming) (1.5.1.8) [N1204]
C12Y105/01009 . . Saccharopine dehydrogenase (NAD+, L-glutamate-forming) (1.5.1.9) [N1204]
C12Y105/01010 . . Saccharopine dehydrogenase (NADP+, L-glutamate-forming) (1.5.1.10) [N1204]
C12Y105/01011 . . D-Octopine dehydrogenase (1.5.1.11) [N1204]
C12Y105/01012 . . 1-Pyrroline-5-carboxylate dehydrogenase (1.5.1.12) [N1204]
C12Y105/01015 . . Methylenetetrahydrofolate dehydrogenase (NAD+) (1.5.1.15) [N1204]
C12Y105/01016 . . D-Lysopine dehydrogenase (1.5.1.16) [N1204]
C12Y105/01017 . . Alanopine dehydrogenase (1.5.1.17) [N1204]
C12Y105/01018 . . Ephedrine dehydrogenase (1.5.1.18) [N1204]
C12Y105/01019 . . D-Nopaline dehydrogenase (1.5.1.19), i.e. D-nopaline synthase [N1202]
C12Y105/01020 . . Methylenetetrahydrofolate reductase [NAD(P)H] (1.5.1.20) [N1202]
C12Y105/01021 . . DELTA1-piperideine-2-carboxylate reductase (1.5.1.21) [N1204]
C12Y105/01022 . . Strombine dehydrogenase (1.5.1.22) [N1204]
C12Y105/01023 . . Tauropine dehydrogenase (1.5.1.23) [N1204]
C12Y105/01024 . . N5-(Carboxyethyl)ornithine synthase (1.5.1.24) [N1204]
C12Y105/01025 . . Thiomorpholine-carboxylate dehydrogenase (1.5.1.25) [N1204]
C12Y105/01026 . . Beta-alanopine dehydrogenase (1.5.1.26) [N1204]
C12Y105/01027 . . 1,2-Dehydroreticulinium reductase (NADPH) (1.5.1.27) [N1204]
C12Y105/01028 . . Opine dehydrogenase (1.5.1.28) [N1204]
C12Y105/01029 . . FMN reductase (1.5.1.29) [N1202]

C12Y105/01030 . . Flavin reductase (1.5.1.30) [N1202]
C12Y105/01031 . . Berberine reductase (1.5.1.31) [N1204]
C12Y105/01032 . . Vomilenine reductase (1.5.1.32) [N1204]
C12Y105/01033 . . Pteridine reductase (1.5.1.33) [N1204]
C12Y105/01034 . . 6,7-Dihydropteridine reductase (1.5.1.34) [N1204]
C12Y105/01036 . . Flavin reductase (NADH) (1.5.1.36) [N1204]
C12Y105/01037 . . FAD reductase (NADH) (1.5.1.37) [N1204]
C12Y105/01038 . . FMN reductase (NADPH) (1.5.1.38) [N1204]
C12Y105/01039 . . FMN reductase (NAD(P)H) (1.5.1.39) [N1204]
C12Y105/01040 . . 8-Hydroxy-5-deazaflavin:NADPH oxidoreductase (1.5.1.40) [N1204]
C12Y105/01041 . . Riboflavin reductase (NAD(P)H) (1.5.1.41) [N1204]
C12Y105/01042 . . FMN reductase (NADH) (1.5.1.42) [N1204]

C12Y105/03 . with oxygen as acceptor (1.5.3) [N1202]
C12Y105/03001 . . Sarcosine oxidase (1.5.3.1) [N1202]
C12Y105/03002 . . N-Methyl-L-amino-acid oxidase (1.5.3.2) [N1204]
C12Y105/03004 . . N6-Methyl-lysine oxidase (1.5.3.4) [N1204]
C12Y105/03005 . . (S)-6-Hydroxynicotine oxidase (1.5.3.5) [N1204]
C12Y105/03006 . . (R)-6-Hydroxynicotine oxidase (1.5.3.6) [N1204]
C12Y105/03007 . . L-Pipecolate oxidase (1.5.3.7) [N1204]
C12Y105/03010 . . Dimethylglycine oxidase (1.5.3.10) [N1204]
C12Y105/03011 . . Polyamine oxidase (1.5.3.11) (C12Y105/03013-C12Y105/03017 take precedence) [N1204]
C12Y105/03012 . . Dihydrobenzophenanthridine oxidase (1.5.3.12) [N1204]
C12Y105/03013 . . N1-Acetylpolyamine oxidase (1.5.3.13) [N1202]
C12Y105/03014 . . Polyamine oxidase (propane-1,3-diamine-forming) (1.5.3.14) [N1202]
C12Y105/03015 . . N8-Acetylspermidine oxidase (propane-1,3-diamine-forming) (1.5.3.15) [N1202]
C12Y105/03016 . . Spermine oxidase (1.5.3.16) [N1202]
C12Y105/03017 . . Non-specific polyamine oxidase (1.5.3.17) [N1202]
C12Y105/03018 . . L-Saccharopine oxidase (1.5.3.18) [N1204]

C12Y105/04 . with a disulfide as acceptor (1.5.4) [N1204]
C12Y105/04001 . . Pyrimidodiazepine synthase (1.5.4.1) [N1204]

C12Y105/05 . with a quinone or similar compound as acceptor (1.5.5) [N1204]
C12Y105/05001 . . Electron-transferring-flavoprotein dehydrogenase (1.5.5.1) [N1204]

C12Y105/07 . with an iron-sulfur protein as acceptor (1.5.7) [N1204]
C12Y105/07001 . . Methylenetetrahydrofolate reductase (ferredoxin) (1.5.7.1) [N1204]

C12Y105/08 . with a flavin as acceptor (1.5.8) [N1204]
C12Y105/08001 . . Dimethylamine dehydrogenase (1.5.8.1) [N1204]
C12Y105/08002 . . Trimethylamine dehydrogenase (1.5.8.2) [N1204]

C12Y105/99 . with other acceptors (1.5.99 [N1204]

C12Y105/99001 . . Sarcosine dehydrogenase (1.5.99.1) [N1204]
C12Y105/99002 . . Dimethylglycine dehydrogenase (1.5.99.2) [N1204]
C12Y105/99003 . . L-Pipecolate dehydrogenase (1.5.99.3) [N1204]
C12Y105/99004 . . Nicotine dehydrogenase (1.5.99.4) [N1204]
C12Y105/99005 . . Methylglutamate dehydrogenase (1.5.99.5) [N1204]
C12Y105/99006 . . Spermidine dehydrogenase (1.5.99.6) [N1204]
C12Y105/99008 . . Proline dehydrogenase (1.5.99.8) [N1204]
C12Y105/99009 . . Methylenetetrahydromethanopterin dehydrogenase (1.5.99.9) [N1204]
C12Y105/99011 . . 5,10-Methylenetetrahydromethanopterin reductase (1.5.99.11) [N1204]
C12Y105/99012 . . Cytokinin dehydrogenase (1.5.99.12) [N1204]
C12Y105/99013 . . D-Proline dehydrogenase (1.5.99.13) [N1204]

C12Y106/00 Oxidoreductases acting on NADH or NADPH (1.6) [N1202]

C12Y106/01 . with NAD+ or NADP+ as acceptor (1.6.1) [N1202]
C12Y106/01001 . . NAD(P)+ transhydrogenase (B-specific) (1.6.1.1) [N1204]
C12Y106/01002 . . NAD(P)+ Transhydrogenase (AB-specific) (1.6.1.2) [N1202]

C12Y106/02 . with a heme protein as acceptor (1.6.2) [N1202]
C12Y106/02002 . . Cytochrome-b5 reductase (1.6.2.2) [N1202]
C12Y106/02004 . . NADPH-hemoprotein reductase (1.6.2.4), i.e. NADP-cytochrome P450-reductase [N1202]
C12Y106/02005 . . NADPH--cytochrome-c2 reductase (1.6.2.5) [N1204]
C12Y106/02006 . . Leghemoglobin reductase (1.6.2.6) [N1204]

C12Y106/03 . with oxygen as acceptor (1.6.3) [N1202]
C12Y106/03001 . . NAD(P)H oxidase (1.6.3.1), i.e. NOX1 [N1202]

C12Y106/05 . with a quinone or similar compound as acceptor (1.6.5) [N1202]
C12Y106/05002 . . NAD(P)H dehydrogenase (quinone) (1.6.5.2) [N1202]
C12Y106/05003 . . NADH dehydrogenase (ubiquinone) (1.6.5.3) [N1202]
C12Y106/05004 . . Monodehydroascorbate reductase (NADH) (1.6.5.4) [N1204]
C12Y106/05005 . . NADPH:quinone reductase (1.6.5.5) [N1204]
C12Y106/05006 . . p-Benzoquinone reductase (NADPH) (1.6.5.6) [N1204]
C12Y106/05007 . . 2-Hydroxy-1,4-benzoquinone reductase (1.6.5.7) [N1204]
C12Y106/05008 . . NADH:ubiquinone reductase (Na+-transporting) (1.6.5.8) [N1204]
C12Y106/05009 . . NADH:ubiquinone reductase (non-electrogenic) (1.6.5.9) [N1204]
C12Y106/05010 . . NADPH dehydrogenase (quinone) (1.6.5.10) [N1204]

C12Y106/06 . with a nitrogenous group as acceptor (1.6.6) [N1204]
C12Y106/06009 . . Trimethylamine-N-oxide reductase (1.6.6.9) [N1204]

C12Y106/99 . with other acceptors (1.6.99) [N1202]
C12Y106/99001 . . NADPH dehydrogenase (1.6.99.1) [N1202]

C12Y106/99003 . . NADH dehydrogenase (1.6.99.3) [N1202]
C12Y106/99005 . . NADH dehydrogenase (quinone) (1.6.99.5) [N1204]

C12Y107/00 Oxidoreductases acting on other nitrogenous compounds as donors (1.7) [N1202]

C12Y107/01 . with NAD+ or NADP+ as acceptor (1.7.1) [N1202]
C12Y107/01001 . . Nitrate reductase (NADH) (1.7.1.1) [N1202]
C12Y107/01002 . . Nitrate reductase [NAD(P)H] (1.7.1.2) [N1202]
C12Y107/01003 . . Nitrate reductase (NADPH) (1.7.1.3) [N1202]
C12Y107/01004 . . Nitrite reductase [NAD(P)H] (1.7.1.4) [N1202]
C12Y107/01005 . . Hyponitrite reductase (1.7.1.5) [N1204]
C12Y107/01006 . . Azobenzene reductase (1.7.1.6) [N1204]
C12Y107/01007 . . GMP reductase (1.7.1.7) [N1204]
C12Y107/01009 . . Nitroquinoline-N-oxide reductase (1.7.1.9) [N1204]
C12Y107/01010 . . Hydroxylamine reductase (NADH) (1.7.1.10) [N1204]
C12Y107/01011 . . 4-(Dimethylamino)phenylazoxybenzene reductase (1.7.1.11) [N1204]
C12Y107/01012 . . N-Hydroxy-2-acetamidofluorene reductase (1.7.1.12) [N1204]
C12Y107/01013 . . PreQ1 synthase (1.7.1.13) [N1204]
C12Y107/01014 . . Nitric oxide reductase (NAD(P), nitrous oxide-forming) (1.7.1.14) [N1204]

C12Y107/02 . with a cytochrome as acceptor (1.7.2) [N1204]
C12Y107/02001 . . Nitrite reductase (NO-forming) (1.7.2.1) [N1204]
C12Y107/02002 . . Nitrite reductase (cytochrome; ammonia-forming) (1.7.2.2) [N1204]
C12Y107/02003 . . Trimethylamine-N-oxide reductase (cytochrome c) (1.7.2.3) [N1204]
C12Y107/02004 . . Nitrous-oxide reductase (1.7.2.4) [N1204]
C12Y107/02005 . . Nitric-oxide reductase (cytochrome c) (1.7.2.5) [N1204]

C12Y107/03 . with oxygen as acceptor (1.7.3) [N1202]
C12Y107/03001 . . Nitroalkane oxidase (1.7.3.1) [N1204]
C12Y107/03002 . . Acetylindoxyl oxidase (1.7.3.2) [N1204]
C12Y107/03003 . . Factor-independent urate hydroxylase (1.7.3.3), i.e. uricase [N1202]
C12Y107/03004 . . Hydroxylamine oxidase (1.7.3.4) [N1204]
C12Y107/03005 . . 3-Aci-nitropropanoate oxidase (1.7.3.5) [N1204]

C12Y107/05 . with a quinone or similar compound as acceptor (1.7.5) [N1204]
C12Y107/05001 . . Nitrate reductase (quinone) (1.7.5.1) [N1204]
C12Y107/05002 . . Nitric oxide reductase (menaquinol) (1.7.5.2) [N1204]

C12Y107/06 . with a nitrogenous group as acceptor (1.7.6) [N1204]
C12Y107/06001 . . Nitrite dismutase (1.7.6.1) [N1204]

C12Y107/07 . with an iron-sulfur protein as acceptor (1.7.7) [N1204]
C12Y107/07001 . . Ferredoxin--nitrite reductase (1.7.7.1) [N1204]
C12Y107/07002 . . Ferredoxin--nitrate reductase (1.7.7.2) [N1204]

C12Y107/99 . with other acceptors (1.7.99) [N1202]
C12Y107/99001 . . Hydroxylamine reductase (1.7.99.1) [N1204]
C12Y107/99004 . . Nitrate reductase (1.7.99.4) [N1202]
C12Y107/99008 . . Hydrazine oxidoreductase (1.7.99.8) [N1204]

C12Y108/00 Oxidoreductases acting on sulfur groups as donors (1.8) [N1202]

C12Y108/01 . with NAD+ or NADP+ as acceptor (1.8.1) [N1202]
C12Y108/01002 . . Sulfite reductase (NADPH) (1.8.1.2) [N1204]
C12Y108/01003 . . Hypotaurine dehydrogenase (1.8.1.3) [N1204]
C12Y108/01004 . . Dihydrolipoyl dehydrogenase (1.8.1.4), i.e. lipoamide-dehydrogenase [N1202]
C12Y108/01005 . . 2-Oxopropyl-CoM reductase (carboxylating) (1.8.1.5) [N1204]
C12Y108/01006 . . Cystine reductase (1.8.1.6) [N1204]
C12Y108/01007 . . Glutathione-disulfide reductase (1.8.1.7), i.e. glutathione reductase (NADPH) [N1202]
C12Y108/01008 . . Protein-disulfide reductase (1.8.1.8), i.e. thioredoxin [N1202]
C12Y108/01009 . . Thioredoxin-disulfide reductase (1.8.1.9), i.e. thioredoxin-reductase [N1202]
C12Y108/01010 . . CoA-glutathione reductase (NADPH) (1.8.1.10) [N1202]
C12Y108/01011 . . Asparagusate reductase (1.8.1.11) [N1204]
C12Y108/01012 . . Trypanothione reductase (1.8.1.12) [N1202]
C12Y108/01013 . . Bis-gamma-glutamylcystine reductase (1.8.1.13) [N1204]
C12Y108/01014 . . CoA-disulfide reductase (1.8.1.14) [N1204]
C12Y108/01015 . . Mycothione reductase (1.8.1.15) [N1204]
C12Y108/01016 . . Glutathione amide reductase (1.8.1.16) [N1204]
C12Y108/01017 . . Dimethylsulfone reductase (1.8.1.17) [N1204]

C12Y108/02 . with a cytochrome as acceptor (1.8.2) [N1204]
C12Y108/02001 . . Sulfite dehydrogenase (1.8.2.1) [N1204]
C12Y108/02002 . . Thiosulfate dehydrogenase (1.8.2.2) [N1204]
C12Y108/02003 . . Sulfide-cytochrome-c reductase (flavocytochrome c) (1.8.2.3) [N1204]
C12Y108/02004 . . Dimethyl sulfide:cytochrome c2 reductase (1.8.2.4) [N1204]

C12Y108/03 . with oxygen as acceptor (1.8.3) [N1202]
C12Y108/03001 . . Sulfite oxidase (1.8.3.1) [N1204]
C12Y108/03002 . . Thiol oxidase (1.8.3.2) [N1202]
C12Y108/03003 . . Glutathione oxidase (1.8.3.3) [N1202]
C12Y108/03004 . . Methanethiol oxidase (1.8.3.4) [N1204]
C12Y108/03005 . . Prenylcysteine oxidase (1.8.3.5) [N1204]
C12Y108/03006 . . Farnesylcysteine lyase (1.8.3.6) [N1204]

C12Y108/04 . with a disulfide as acceptor (1.8.4) [N1202]
C12Y108/04001 . . Glutathione--homocystine transhydrogenase (1.8.4.1) [N1204]
C12Y108/04002 . . Protein-disulfide reductase (glutathione) (1.8.4.2), i.e. BdbC or BdbD [N1202]

C12Y108/04003 . . Glutathione--CoA-glutathione transhydrogenase (1.8.4.3) [N1204]
C12Y108/04004 . . Glutathione--cystine transhydrogenase (1.8.4.4) [N1204]
C12Y108/04005 . . Methionine-S-oxide reductase (1.8.4.5) (C12Y108/04013 or C12Y108/04014 takes precedence) [N1202]
C12Y108/04007 . . Enzyme-thiol transhydrogenase (glutathione-disulfide) (1.8.4.7) [N1204]
C12Y108/04008 . . Phosphoadenylyl-sulfate reductase (thioredoxin) (1.8.4.8) [N1204]
C12Y108/04009 . . Adenylyl-sulfate reductase (glutathione) (1.8.4.9) [N1204]
C12Y108/04010 . . Adenylyl-sulfate reductase (thioredoxin) (1.8.4.10) [N1204]
C12Y108/04011 . . Peptide-methionine (S)-S-oxide reductase (1.8.4.11) [N1204]
C12Y108/04012 . . Peptide-methionine (R)-S-oxide reductase (1.8.4.12) [N1204]
C12Y108/04013 . . L-Methionine (S)-S-oxide reductase (1.8.4.13) [N1202]
C12Y108/04014 . . L-Methionine (R)-S-oxide reductase (1.8.4.14) [N1202]

C12Y108/05 . with a quinone or similar compound as acceptor (1.8.5) [N1204]
C12Y108/05001 . . Glutathione dehydrogenase (ascorbate) (1.8.5.1) [N1204]
C12Y108/05002 . . Thiosulfate dehydrogenase (quinone) (1.8.5.2) [N1204]
C12Y108/05003 . . Dimethylsulfoxide reductase (1.8.5.3) [N1204]
C12Y108/05004 . . Sulfide:quinone reductase (1.8.5.4) [N1204]

C12Y108/07 . with an iron-sulfur protein as acceptor (1.8.7) [N1204]
C12Y108/07001 . . Sulfite reductase (ferredoxin) (1.8.7.1) [N1204]
C12Y108/07002 . . Ferredoxin:thioredoxin reductase (1.8.7.2) [N1204]

C12Y108/98 . with other, known, acceptors (1.8.98) [N1204]
C12Y108/98001 . . CoB--CoM heterodisulfide reductase (1.8.98.1) [N1204]
C12Y108/98002 . . Sulfiredoxin (1.8.98.2) [N1204]

C12Y108/99 . with other acceptors (1.8.99) [N1202]
C12Y108/99001 . . Sulfite reductase (1.8.99.1) [N1202]
C12Y108/99002 . . Adenylyl-sulfate reductase (1.8.99.2) [N1204]
C12Y108/99003 . . Hydrogensulfite reductase (1.8.99.3) [N1204]

C12Y109/00 Oxidoreductases acting on a heme group of donors (1.9) [N1202]

C12Y109/03 . with oxygen as acceptor (1.9.3) [N1202]
C12Y109/03001 . . Cytochrome-c oxidase (1.9.3.1) [N1202]

C12Y109/06 . with a nitrogenous group as acceptor (1.9.6) [N1202]
C12Y109/06001 . . Nitrate reductase (cytochrome) (1.9.6.1) [N1202]

C12Y109/99 . with other acceptors (1.9.99) [N1202]
C12Y109/99001 . . Iron--cytochrome-c reductase (1.9.99.1) [N1204]

C12Y110/00 Oxidoreductases acting on diphenols and related substances as donors (1.10) [N1202]

C12Y110/01 . with NAD+ or NADP+ as acceptor (1.10.1) [N1204]
C12Y110/01001 . . Trans-acenaphthene-1,2-diol dehydrogenase (1.10.1.1) [N1204]

C12Y110/02 . with a cytochrome as acceptor (1.10.2) [N1202]
C12Y110/02001 . . L-Ascorbate--cytochrome-b5 reductase (1.10.2.1) [N1204]
C12Y110/02002 . . Ubiquinol-cytochrome-c reductase (1.10.2.2), i.e. electron-transport-complex-III [N1202]

C12Y110/03 . with an oxygen as acceptor (1.10.3) [N1202]
C12Y110/03001 . . Catechol oxidase (1.10.3.1), i.e. tyrosinase [N1202]
C12Y110/03002 . . Laccase (1.10.3.2) [N1202]
C12Y110/03003 . . L-ascorbate oxidase (1.10.3.3) [N1202]
C12Y110/03004 . . O-aminophenol oxidase (1.10.3.4) [N1202]
C12Y110/03005 . . 3-Hydroxyanthranilate oxidase (1.10.3.5) [N1204]
C12Y110/03006 . . Rifamycin-B oxidase (1.10.3.6) [N1202]
C12Y110/03009 . . Photosystem II (1.10.3.9) [N1204]
C12Y110/03010 . . Ubiquinol oxidase (H+-transporting) (1.10.3.10) [N1204]
C12Y110/03011 . . Ubiquinol oxidase (1.10.3.11) [N1204]
C12Y110/03012 . . Menaquinol oxidase (H+-transporting) (1.10.3.12) [N1204]

C12Y110/09 . with a copper protein as acceptor (1.10.9) [N1202]
C12Y110/09001 . . Plastoquinol-plastocyanin reductase (1.10.9.1) [N1204]

C12Y110/99 . with other acceptors (1.10.99) [N1202]
C12Y110/99002 . . Ribosyldihydronicotinamide dehydrogenase (quinone) (1.10.99.2) [N1204]
C12Y110/99003 . . Violaxanthin de-epoxidase (1.10.99.3) [N1202]

C12Y111/00 **Oxidoreductases acting on a peroxide as acceptor (1.11)** [N1202]

C12Y111/01 . Peroxidases (1.11.1) [N1202]
C12Y111/01001 . . NADH peroxidase (1.11.1.1) [N1202]
C12Y111/01002 . . NADPH peroxidase (1.11.1.2) [N1202]
C12Y111/01003 . . Fatty-acid peroxidase (1.11.1.3) [N1202]
C12Y111/01005 . . Cytochrome-c peroxidase (1.11.1.5) [N1202]
C12Y111/01006 . . Catalase (1.11.1.6) [N1202]
C12Y111/01007 . . Peroxidase (1.11.1.7), i.e. horseradish-peroxidase [N1202]
C12Y111/01008 . . Iodide peroxidase (1.11.1.8) [N1202]
C12Y111/01009 . . Glutathione peroxidase (1.11.1.9) [N1202]
C12Y111/01010 . . Chloride peroxidase (1.11.1.10) [N1202]
C12Y111/01011 . . L-ascorbate peroxidase (1.11.1.11) [N1202]
C12Y111/01012 . . Phospholipid-hydroperoxide glutathione peroxidase (1.11.1.12) [N1202]
C12Y111/01013 . . Manganese peroxidase (1.11.1.13) [N1202]
C12Y111/01014 . . Lignin peroxidase (1.11.1.14) [N1202]

C12Y111/01015 . . Peroxiredoxin (1.11.1.15) [N1202]
C12Y111/01016 . . Versatile peroxidase (1.11.1.16) [N1202]
C12Y111/01017 . . Glutathione amide-dependent peroxidase (1.11.1.17) [N1202]
C12Y111/01018 . . Bromide peroxidase (1.11.1.18) [N1202]
C12Y111/01019 . . Dye decolorizing peroxidase (1.11.1.19) [N1202]
C12Y111/01020 . . Prostamide/prostaglandin F2-alpha synthase (1.11.1.20) [N1204]
C12Y111/01021 . . Catalase-peroxidase (1.11.1.21) [N1202]
C12Y111/01802 . . Chloride peroxidase (vanadium-containing) (1.11.1.B2) [N1202]
C12Y111/01806 . . Iodide peroxidase (vanadium-containing) (1.11.1.B6) [N1202]
C12Y111/01807 . . Bromide peroxidase (heme-containing) (1.11.1.B7) [N1202]
C12Y111/01808 . . Bromide peroxidase (metal-containing) (1.11.1.B8) [N1202]

C12Y111/02 . with H_2O_2 as acceptor, one oxygen atom of which is incorporated into the product (1.11.2) [N1202]
C12Y111/02001 . . Unspecific peroxygenase (1.11.2.1) [N1202]
C12Y111/02002 . . Myeloperoxidase (1.11.2.2) [N1202]
C12Y111/02003 . . Plant seed peroxygenase (1.11.2.3) [N1204]
C12Y111/02004 . . Fatty-acid peroxygenase (1.11.2.4) [N1204]

C12Y112/00 Oxidoreductases acting on hydrogen as donor (1.12) [N1202]

C12Y112/01 . with NAD+ or NADP+ as acceptor (1.12.1) [N1202]
C12Y112/01002 . . Hydrogen dehydrogenase (1.12.1.2) [N1202]
C12Y112/01003 . . Hydrogen dehydrogenase (NADP+) (1.12.1.3) [N1204]
C12Y112/01004 . . Hydrogenase (NAD+, ferredoxin) (1.12.1.4) [N1204]

C12Y112/02 . with a cytochrome as acceptor (1.12.2) [N1204]
C12Y112/02001 . . Cytochrome-c3 hydrogenase (1.12.2.1) [N1204]

C12Y112/05 . with a quinone or similar compound as acceptor (1.12.5) [N1204]
C12Y112/05001 . . Hydrogen:quinone oxidoreductase (1.12.5.1) [N1204]

C12Y112/07 . with an iron-sulfur protein as acceptor (1.12.7) [N1202]
C12Y112/07002 . . Ferredoxin hydrogenase (1.12.7.2) [N1202]

C12Y112/98 . with other, known, acceptors (1.12.98) [N1204]
C12Y112/98001 . . Coenzyme F420 hydrogenase (1.12.98.1) [N1204]
C12Y112/98002 . . 5,10-Methenyltetrahydromethanopterin hydrogenase (1.12.98.2) [N1204]
C12Y112/98003 . . Methanosarcina-phenazine hydrogenase (1.12.98.3) [N1204]

C12Y112/99 . with other acceptors (1.12.99) [N1204]
C12Y112/99006 . . Hydrogenase (acceptor) (1.12.99.6) [N1204]

C12Y113/00 Oxidoreductases acting on single donors with incorporation of molecular oxygen (oxygenases) (1.13) [N1202]

C12Y113/11 . with incorporation of two atoms of oxygen (1.13.11) [N1202]
C12Y113/11001 . . Catechol 1,2-dioxygenase (1.13.11.1) [N1202]
C12Y113/11002 . . Catechol 2,3-dioxygenase (1.13.11.2) [N1202]
C12Y113/11003 . . Protocatechuate 3,4-dioxygenase (1.13.11.3) [N1202]
C12Y113/11004 . . Gentisate 1,2-dioxygenase (1.13.11.4) [N1204]
C12Y113/11005 . . Homogentisate 1,2-dioxygenase (1.13.11.5) [N1202]
C12Y113/11006 . . 3-Hydroxyanthranilate 3,4-dioxygenase (1.13.11.6) [N1204]
C12Y113/11008 . . Protocatechuate 4,5-dioxygenase (1.13.11.8) [N1204]
C12Y113/11009 . . 2,5-Dihydroxypyridine 5,6-dioxygenase (1.13.11.9) [N1204]
C12Y113/11010 . . 7,8-Dihydroxykynurenate 8,8a-dioxygenase (1.13.11.10) [N1204]
C12Y113/11011 . . Tryptophan 2,3-dioxygenase (1.13.11.11), i.e. indolamine 2,3-dioxygenase 2 [N1202]
C12Y113/11012 . . Linoleate 13S-lipoxygenase (1.13.11.12) [N1202]
C12Y113/11013 . . Ascorbate 2,3-dioxygenase (1.13.11.13) [N1204]
C12Y113/11014 . . 2,3-Dihydroxybenzoate 3,4-dioxygenase (1.13.11.14) [N1202]
C12Y113/11015 . . 3,4-Dihydroxyphenylacetate 2,3-dioxygenase (1.13.11.15) [N1204]
C12Y113/11016 . . 3-Carboxyethylcatechol 2,3-dioxygenase (1.13.11.16) [N1204]
C12Y113/11017 . . Indole 2,3-dioxygenase (1.13.11.17) [N1204]
C12Y113/11018 . . Sulfur dioxygenase (1.13.11.18) [N1204]
C12Y113/11019 . . Cysteamine dioxygenase (1.13.11.19) [N1204]
C12Y113/11020 . . Cysteine dioxygenase (1.13.11.20) [N1204]
C12Y113/11022 . . Caffeate 3,4-dioxygenase (1.13.11.22) [N1204]
C12Y113/11023 . . 2,3-Dihydroxyindole 2,3-dioxygenase (1.13.11.23) [N1204]
C12Y113/11024 . . Quercetin 2,3-dioxygenase (1.13.11.24) [N1202]
C12Y113/11025 . . 3,4-Dihydroxy-9,10-secoandrosta-1,3,5(10)-triene-9,17-dione 4,5-dioxygenase (1.13.11.25) [N1204]
C12Y113/11026 . . Peptide-tryptophan 2,3-dioxygenase (1.13.11.26) [N1204]
C12Y113/11027 . . 4-Hydroxyphenylpyruvate dioxygenase (1.13.11.27) [N1202]
C12Y113/11028 . . 2,3-Dihydroxybenzoate 2,3-dioxygenase (1.13.11.28) [N1204]
C12Y113/11029 . . Stizolobate synthase (1.13.11.29) [N1204]
C12Y113/11030 . . Stizolobinate synthase (1.13.11.30) [N1204]
C12Y113/11031 . . Arachidonate 12-lipoxygenase (1.13.11.31), i.e. lipoxygenase-type-12 [N1202]
C12Y113/11033 . . Arachidonate 15-lipoxygenase (1.13.11.33) [N1202]
C12Y113/11034 . . Arachidonate 5-lipoxygenase (1.13.11.34) [N1202]
C12Y113/11035 . . Pyrogallol 1,2-oxygenase (1.13.11.35) [N1204]
C12Y113/11036 . . Chloridazon-catechol dioxygenase (1.13.11.36) [N1204]
C12Y113/11037 . . Hydroxyquinol 1,2-dioxygenase (1.13.11.37) [N1204]
C12Y113/11038 . . 1-Hydroxy-2-naphthoate 1,2-dioxygenase (1.13.11.38) [N1204]
C12Y113/11039 . . Biphenyl-2,3-diol 1,2-dioxygenase (1.13.11.39) [N1204]
C12Y113/11040 . . Arachidonate 8-lipoxygenase (1.13.11.40) [N1204]
C12Y113/11041 . . 2,4'-Dihydroxyacetophenone dioxygenase (1.13.11.41) [N1204]
C12Y113/11043 . . Lignostilbene alpha-beta-dioxygenase (1.13.11.43) [N1204]

C12Y113/11044 . . Linoleate diol synthase (1.13.11.44) (C12Y113/11060, C12Y504/04006 take precedence) [N1204]
C12Y113/11045 . . Linoleate 11-lipoxygenase (1.13.11.45) [N1204]
C12Y113/11046 . . 4-Hydroxymandelate synthase (1.13.11.46) [N1204]
C12Y113/11047 . . 3-Hydroxy-4-oxoquinoline 2,4-dioxygenase (1.13.11.47) [N1204]
C12Y113/11048 . . 3-Hydroxy-2-methylquinolin-4-one 2,4-dioxygenase (1.13.11.48) [N1204]
C12Y113/11049 . . Chlorite O2-lyase (1.13.11.49) [N1204]
C12Y113/11050 . . Acetylacetone-cleaving enzyme (1.13.11.50) [N1204]
C12Y113/11051 . . 9-Cis-epoxycarotenoid dioxygenase (1.13.11.51) [N1204]
C12Y113/11052 . . Indoleamine 2,3-dioxygenase (1.13.11.52), i.e. indoleamine 2,3-dioxygenase 1 [N1202]
C12Y113/11053 . . Acireductone dioxygenase (Ni2+-requiring) (1.13.11.53) [N1202]
C12Y113/11054 . . Acireductone dioxygenase (Fe(2+)-requiring) (1.13.11.54) [N1204]
C12Y113/11055 . . Sulfur oxygenase/reductase (1.13.11.55) [N1204]
C12Y113/11056 . . 1,2-Dihydroxynaphthalene dioxygenase (1.13.11.56) [N1204]
C12Y113/11057 . . Gallate dioxygenase (1.13.11.57) [N1204]
C12Y113/11058 . . Linoleate 9S-lipoxygenase (1.13.11.58) [N1204]
C12Y113/11059 . . Torulene dioxygenase (1.13.11.59) [N1204]
C12Y113/11060 . . Linoleate 8R-lipoxygenase (1.13.11.60) [N1204]
C12Y113/11061 . . Linoleate 9R-lipoxygenase (1.13.11.61) [N1204]
C12Y113/11062 . . Linoleate 10R-lipoxygenase (1.13.11.62) [N1204]

C12Y113/12 . with incorporation of one atom of oxygen (internal monooxygenases or internal mixed function oxidases) (1.13.12) [N1202]
C12Y113/12001 . . Arginine 2-monooxygenase (1.13.12.1) [N1204]
C12Y113/12002 . . Lysine 2-monooxygenase (1.13.12.2) [N1202]
C12Y113/12003 . . Tryptophan 2-monooxygenase (1.13.12.3) [N1204]
C12Y113/12004 . . Lactate 2-monooxygenase (1.13.12.4) [N1202]
C12Y113/12005 . . Renilla-luciferin 2-monooxygenase (1.13.12.5), i.e. renilla-luciferase [N1202]
C12Y113/12006 . . Cypridina-luciferin 2-monooxygenase (1.13.12.6), i.e. cypridina-luciferase [N1202]
C12Y113/12007 . . Photinus-luciferin 4-monooxygenase (ATP-hydrolysing) (1.13.12.7), i.e. firefly-luciferase [N1202]
C12Y113/12008 . . Watasenia-luciferin 2-monooxygenase (1.13.12.8) [N1202]
C12Y113/12009 . . Phenylalanine 2-monooxygenase (1.13.12.9) [N1204]
C12Y113/12012 . . Apo-beta-carotenoid-14',13'-dioxygenase (1.13.12.12) [N1204]
C12Y113/12013 . . Oplophorus-luciferin 2-monooxygenase (1.13.12.13) [N1202]
C12Y113/12015 . . 3,4-Dihydroxyphenylalanine oxidative deaminase (1.13.12.15) [N1204]
C12Y113/12016 . . Nitronate monooxygenase (1.13.12.16) [N1204]
C12Y113/12017 . . Dichloroarcyriaflavin A synthase (1.13.12.17) [N1204]
C12Y113/12018 . . Dinoflagellate luciferase (1.13.12.18) [N1202]
C12Y113/12019 . . 2-Oxuglutarate dioxygenase (ethylene-forming) (1.13.12.19) [N1204]

C12Y113/99 . Miscellaneous (1.13.99) [N1202]
C12Y113/99001 . . Inositol oxygenase (1.13.99.1), i.e. myo-inositol oxygenase [N1202]

C12Y113/99003 . . Tryptophan 2'-dioxygenase (1.13.99.3), i.e. indole-3-alkane-alpha-hydroxylase [N1202]

C12Y114/00 Oxidoreductases acting on paired donors, with incorporation or reduction of molecular oxygen (1.14) [N1202]

C12Y114/11 . with 2-oxoglutarate as one donor, and incorporation of one atom each of oxygen into both donors (1.14.11) [N1202]
C12Y114/11001 . . Gamma-butyrobetaine dioxygenase (1.14.11.1) [N1204]
C12Y114/11002 . . Procollagen-proline dioxygenase (1.14.11.2), i.e. proline-hydroxylase [N1202]
C12Y114/11003 . . Pyrimidine-deoxynucleoside 2'-dioxygenase (1.14.11.3) [N1204]
C12Y114/11004 . . Procollagen-lysine 5-dioxygenase (1.14.11.4), i.e. lysine-hydroxylase [N1202]
C12Y114/11006 . . Thymine dioxygenase (1.14.11.6) [N1204]
C12Y114/11007 . . Procollagen-proline 3-dioxygenase (1.14.11.7) [N1204]
C12Y114/11008 . . Trimethyllysine dioxygenase (1.14.11.8) [N1204]
C12Y114/11009 . . Flavanone 3-dioxygenase (1.14.11.9), i.e. naringenin-3-dioxygenase [N1202]
C12Y114/11010 . . Pyrimidine-deoxynucleoside 1'-dioxygenase (1.14.11.10) [N1204]
C12Y114/11011 . . Hyoscyamine (6S)-dioxygenase (1.14.11.11) [N1204]
C12Y114/11012 . . Gibberellin-44 dioxygenase (1.14.11.12) [N1204]
C12Y114/11013 . . Gibberellin 2-beta-dioxygenase (1.14.11.13) [N1204]
C12Y114/11014 . . 6-Beta-hydroxyhyoscyamine epoxidase (1.14.11.14) [N1202]
C12Y114/11015 . . Gibberellin 3-beta-dioxygenase (1.14.11.15) [N1202]
C12Y114/11016 . . Peptide-aspartate beta-dioxygenase (1.14.11.16), i.e. aspartyl (asparaginyl) beta-hydroxylase [N1202]
C12Y114/11017 . . Taurine dioxygenase (1.14.11.17) [N1204]
C12Y114/11018 . . Phytanoyl-CoA dioxygenase (1.14.11.18) [N1204]
C12Y114/11019 . . Leucocyanidin oxygenase (1.14.11.19) [N1204]
C12Y114/11020 . . Deacetoxyvindoline 4-hydroxylase (1.14.11.20) [N1204]
C12Y114/11021 . . Clavaminate synthase (1.14.11.21) [N1204]
C12Y114/11022 . . Flavone synthase (1.14.11.22) [N1204]
C12Y114/11023 . . Flavonol synthase (1.14.11.23) [N1202]
C12Y114/11024 . . 2'-Deoxymugineic-acid 2'-dioxygenase (1.14.11.24) [N1204]
C12Y114/11025 . . Mugineic-acid 3-dioxygenase (1.14.11.25) [N1204]
C12Y114/11026 . . Deacetoxycephalosporin-C hydroxylase (1.14.11.26) [N1204]
C12Y114/11027 . . [Histone H3-lysine-36 demethylase (1.14.11.27) [N1204]
C12Y114/11028 . . Proline 3-hydroxylase (1.14.11.28) [N1204]
C12Y114/11029 . . Hypoxia-inducible factor-proline dioxygenase (1.14.11.29) [N1204]
C12Y114/11030 . . Hypoxia-inducible factor-asparagine dioxygenase (1.14.11.30) [N1202]
C12Y114/11031 . . Thebaine 6-O-demethylase (1.14.11.31) [N1204]
C12Y114/11032 . . Codeine 3-O-demethylase (1.14.11.32) [N1204]
C12Y114/11033 . . DNA oxidative demethylase (1.14.11.33) [N1204]
C12Y114/11034 . . 2-Oxoglutarate/L-arginine monooxygenase/decarboxylase (succinate-forming) (1.14.11.34) [N1204]

C12Y114/12 . with NADH or NADPH as one donor, and incorporation of two atoms of oxygen into

one donor (1.14.12) [N1202]

C12Y114/12001 . . Anthranilate 1,2-dioxygenase (deaminating, decarboxylating) (1.14.12.1) [N1204]
C12Y114/12003 . . Benzene 1,2-dioxygenase (1.14.12.3) [N1202]
C12Y114/12004 . . 3-Hydroxy-2-methylpyridinecarboxylate dioxygenase (1.14.12.4) [N1204]
C12Y114/12005 . . 5-Pyridoxate dioxygenase (1.14.12.5) [N1204]
C12Y114/12007 . . Phthalate 4,5-dioxygenase (1.14.12.7) [N1204]
C12Y114/12008 . . 4-Sulfobenzoate 3,4-dioxygenase (1.14.12.8) [N1202]
C12Y114/12009 . . 4-Chlorophenylacetate 3,4-dioxygenase (1.14.12.9) [N1204]
C12Y114/12010 . . Benzoate 1,2-dioxygenase (1.14.12.10) [N1204]
C12Y114/12011 . . Toluene dioxygenase (1.14.12.11) [N1202]
C12Y114/12012 . . Naphthalene 1,2-dioxygenase (1.14.12.12) [N1202]
C12Y114/12013 . . 2-Chlorobenzoate 1,2-dioxygenase (1.14.12.13) [N1204]
C12Y114/12014 . . 2-Aminobenzenesulfonate 2,3-dioxygenase (1.14.12.14) [N1204]
C12Y114/12015 . . Terephthalate 1,2-dioxygenase (1.14.12.15) [N1204]
C12Y114/12016 . . 2-Hydroxyquinoline 5,6-dioxygenase (1.14.12.16) [N1204]
C12Y114/12017 . . Nitric oxide dioxygenase (1.14.12.17) [N1204]
C12Y114/12018 . . Biphenyl 2,3-dioxygenase (1.14.12.18) [N1202]
C12Y114/12019 . . 3-Phenylpropanoate dioxygenase (1.14.12.19) [N1204]
C12Y114/12020 . . Pheophorbide a oxygenase (1.14.12.20) [N1204]
C12Y114/12021 . . Benzoyl-CoA 2,3-dioxygenase (1.14.12.21) [N1204]
C12Y114/12022 . . Carbazole 1,9a-dioxygenase (1.14.12.22) [N1204]

C12Y114/13 . with NADH or NADPH as one donor, and incorporation of one atom of oxygen (1.14.13) [N1202]
C12Y114/13001 . . Salicylate 1-monooxygenase (1.14.13.1) [N1202]
C12Y114/13002 . . 4-Hydroxybenzoate 3-monooxygenase (1.14.13.2) [N1202]
C12Y114/13004 . . Melilotate 3-monooxygenase (1.14.13.4) [N1204]
C12Y114/13005 . . Imidazoleacetate 4-monooxygenase (1.14.13.5) [N1204]
C12Y114/13006 . . Orcinol 2-monooxygenase (1.14.13.6) [N1204]
C12Y114/13007 . . Phenol 2-monooxygenase (1.14.13.7) [N1202]
C12Y114/13008 . . Flavin-containing monooxygenase (1.14.13.8), i.e. dimethylaniline-monooxygenase [N1202]
C12Y114/13009 . . Kynurenine 3-monooxygenase (1.14.13.9) [N1204]
C12Y114/13010 . . 2,6-Dihydroxypyridine 3-monooxygenase (1.14.13.10) [N1204]
C12Y114/13011 . . Trans-cinnamate 4-monooxygenase (1.14.13.11) [N1202]
C12Y114/13012 . . Benzoate 4-monooxygenase (1.14.13.12) [N1202]
C12Y114/13013 . . Calcidiol 1-monooxygenase (1.14.13.13), i.e. 25-hydroxyvitamin D-1-alpha-hydroxylase [N1202]
C12Y114/13014 . . Trans-cinnamate 2-monooxygenase (1.14.13.14) [N1204]
C12Y114/13015 . . Cholestanetriol 26-monooxygenase (1.14.13.15) [N1204]
C12Y114/13016 . . Cyclopentanone monooxygenase (1.14.13.16) [N1202]
C12Y114/13017 . . Cholesterol 7-alpha-monooxygenase (1.14.13.17) [N1202]
C12Y114/13018 . . 4-Hydroxyphenylacetate 1-monooxygenase (1.14.13.18) [N1204]

C12Y114/13019 . . Taxifolin 8-monooxygenase (1.14.13.19) [N1204]
C12Y114/13020 . . 2,4-Dichlorophenol 6-monooxygenase (1.14.13.20) [N1204]
C12Y114/13021 . . Flavonoid 3'-monooxygenase (1.14.13.21) [N1202]
C12Y114/13022 . . Cyclohexanone monooxygenase (1.14.13.22) [N1204]
C12Y114/13023 . . 3-Hydroxybenzoate 4-monooxygenase (1.14.13.23) [N1204]
C12Y114/13024 . . 3-Hydroxybenzoate 6-monooxygenase (1.14.13.24) [N1204]
C12Y114/13025 . . Methane monooxygenase (1.14.13.25) [N1202]
C12Y114/13026 . . Phosphatidylcholine 12-monooxygenase (1.14.13.26) [N1204]
C12Y114/13027 . . 4-Aminobenzoate 1-monooxygenase (1.14.13.27) [N1204]
C12Y114/13028 . . 3,9-Dihydroxypterocarpan 6A-monooxygenase (1.14.13.28) [N1204]
C12Y114/13029 . . 4-Nitrophenol 2-monooxygenase (1.14.13.29) [N1204]
C12Y114/13030 . . Leukotriene-B4 20-monooxygenase (1.14.13.30), i.e. leukotriene-B4-omega-hydroxylase [N1202]
C12Y114/13031 . . 2-Nitrophenol 2-monooxygenase (1.14.13.31) [N1204]
C12Y114/13032 . . Albendazole monooxygenase (1.14.13.32) [N1204]
C12Y114/13033 . . 4-Hydroxybenzoate 3-monooxygenase (NAD(P)H) (1.14.13.33) [N1204]
C12Y114/13034 . . Leukotriene-E4 20-monooxygenase (1.14.13.34) [N1204]
C12Y114/13035 . . Anthranilate 3-monooxygenase (deaminating) (1.14.13.35) [N1204]
C12Y114/13036 . . 5-O-(4-Coumaroyl)-D-quinate 3'-monooxygenase (1.14.13.36) [N1204]
C12Y114/13037 . . Methyltetrahydroprotoberberine 14-monooxygenase (1.14.13.37) [N1204]
C12Y114/13038 . . Anhydrotetracycline monooxygenase (1.14.13.38) [N1204]
C12Y114/13039 . . Nitric-oxide synthase (1.14.13.39), i.e. NOS [N1202]
C12Y114/13040 . . Anthraniloyl-CoA monooxygenase (1.14.13.40) [N1204]
C12Y114/13041 . . Tyrosine N-monooxygenase (1.14.13.41) [N1202]
C12Y114/13043 . . Questin monooxygenase (1.14.13.43) [N1204]
C12Y114/13044 . . 2-Hydroxybiphenyl 3-monooxygenase (1.14.13.44) [N1204]
C12Y114/13046 . . (-)-Menthol monooxygenase (1.14.13.46) [N1204]
C12Y114/13047 . . (S)-Limonene 3-monooxygenase (1.14.13.47) [N1204]
C12Y114/13048 . . (S)-Limonene 6-monooxygenase (1.14.13.48) [N1204]
C12Y114/13049 . . (S)-Limonene 7-monooxygenase (1.14.13.49) [N1204]
C12Y114/13050 . . Pentachlorophenol monooxygenase (1.14.13.50) [N1204]
C12Y114/13051 . . 6-Oxocineole dehydrogenase (1.14.13.51) [N1204]
C12Y114/13052 . . Isoflavone 3'-hydroxylase (1.14.13.52) [N1204]
C12Y114/13053 . . 4'-Methoxyisoflavone 2'-hydroxylase (1.14.13.53) [N1204]
C12Y114/13054 . . Ketosteroid monooxygenase (1.14.13.54) [N1204]
C12Y114/13055 . . Protopine 6-monooxygenase (1.14.13.55) [N1204]
C12Y114/13056 . . Dihydrosanguinarine 10-monooxygenase (1.14.13.56) [N1204]
C12Y114/13057 . . Dihydrochelirubine 12-monooxygenase (1.14.13.57) [N1204]
C12Y114/13058 . . Benzoyl-CoA 3-monooxygenase (1.14.13.58) [N1204]
C12Y114/13059 . . L-Lysine 6-monooxygenase (NADPH) (1.14.13.59) [N1204]
C12Y114/13060 . . 27-Hydroxycholesterol 7-alpha-monooxygenase (1.14.13.60) [N1204]
C12Y114/13061 . . 2-Hydroxyquinoline 8-monooxygenase (1.14.13.61) [N1204]

C12Y114/13062 . . 4-Hydroxyquinoline 3-monooxygenase (1.14.13.62) [N1204]
C12Y114/13063 . . 3-Hydroxyphenylacetate 6-hydroxylase (1.14.13.63) [N1204]
C12Y114/13064 . . 4-Hydroxybenzoate 1-hydroxylase (1.14.13.64) [N1204]
C12Y114/13066 . . 2-Hydroxycyclohexanone 2-monooxygenase (1.14.13.66) [N1204]
C12Y114/13067 . . Quinine 3-monooxygenase (1.14.13.67) [N1204]
C12Y114/13068 . . 4-Hydroxyphenylacetaldehyde oxime monooxygenase (1.14.13.68) [N1204]
C12Y114/13069 . . Alkene monooxygenase (1.14.13.69) [N1202]
C12Y114/13070 . . Sterol 14-demethylase (1.14.13.70) [N1202]
C12Y114/13071 . . N-Methylcoclaurine 3'-monooxygenase (1.14.13.71) [N1204]
C12Y114/13072 . . Methylsterol monooxygenase (1.14.13.72) [N1204]
C12Y114/13073 . . Tabersonine 16-hydroxylase (1.14.13.73) [N1204]
C12Y114/13074 . . 7-Deoxyloganin 7-hydroxylase (1.14.13.74) [N1204]
C12Y114/13075 . . Vinorine hydroxylase (1.14.13.75) [N1204]
C12Y114/13076 . . Taxane 10-beta-hydroxylase (1.14.13.76) [N1204]
C12Y114/13077 . . Taxane 13-alpha-hydroxylase (1.14.13.77) [N1204]
C12Y114/13078 . . Ent-kaurene oxidase (1.14.13.78) [N1204]
C12Y114/13079 . . Ent-kaurenoic acid oxidase (1.14.13.79) [N1204]
C12Y114/13080 . . (R)-Limonene 6-monooxygenase (1.14.13.80) [N1204]
C12Y114/13081 . . Magnesium-protoporphyrin IX monomethyl ester (oxidative) cyclase (1.14.13.81) [N1204]
C12Y114/13082 . . Vanillate monooxygenase (1.14.13.82) [N1204]
C12Y114/13083 . . Precorrin-3B synthase (1.14.13.83) [N1204]
C12Y114/13084 . . 4-Hydroxyacetophenone monooxygenase (1.14.13.84) [N1204]
C12Y114/13085 . . Glyceollin synthase (1.14.13.85) [N1204]
C12Y114/13086 . . 2-Hydroxyisoflavanone synthase (1.14.13.86) [N1204]
C12Y114/13087 . . Licodione synthase (1.14.13.87) [N1204]
C12Y114/13088 . . Flavonoid 3',5'-hydroxylase (1.14.13.88) [N1202]
C12Y114/13089 . . Isoflavone 2'-hydroxylase (1.14.13.89) [N1204]
C12Y114/13090 . . Zeaxanthin epoxidase (1.14.13.90) [N1202]
C12Y114/13091 . . Deoxysarpagine hydroxylase (1.14.13.91) [N1204]
C12Y114/13092 . . Phenylacetone monooxygenase (1.14.13.92) [N1204]
C12Y114/13093 . . (+)-Abscisic acid 8'-hydroxylase (1.14.13.93) [N1204]
C12Y114/13094 . . Lithocholate 6-beta-hydroxylase (1.14.13.94) [N1204]
C12Y114/13095 . . 7-Alpha-hydroxycholest-4-en-3-one 12-alpha-hydroxylase (1.14.13.95) [N1204]
C12Y114/13096 . . 5-Beta-cholestane-3-alpha,7-alpha-diol 12-alpha-hydroxylase (1.14.13.96) [N1204]
C12Y114/13097 . . Taurochenodeoxycholate 6-alpha-hydroxylase (1.14.13.97) [N1204]
C12Y114/13098 . . Cholesterol 24-hydroxylase (1.14.13.98) [N1204]
C12Y114/13099 . . 24-Hydroxycholesterol 7-alpha-hydroxylase (1.14.13.99) [N1204]
C12Y114/13100 . . 25-Hydroxycholesterol 7-alpha-hydroxylase (1.14.13.100) [N1204]
C12Y114/13101 . . Senecionine N-oxygenase (1.14.13.101) [N1204]
C12Y114/13102 . . Psoralen synthase (1.14.13.102) [N1204]
C12Y114/13103 . . 8-Dimethylallylnaringenin 2'-hydroxylase (1.14.13.103) [N1204]

C12Y114/13104 . . (+)-Menthofuran synthase (1.14.13.104) [N1204]
C12Y114/13105 . . Monocyclic monoterpene ketone monooxygenase (1.14.13.105) [N1204]
C12Y114/13106 . . Epi-isozizaene 5-monooxygenase (1.14.13.106) [N1204]
C12Y114/13107 . . Limonene 1,2-monooxygenase (1.14.13.107) [N1204]
C12Y114/13108 . . Abietadiene hydroxylase (1.14.13.108) [N1204]
C12Y114/13109 . . Abietadienol hydroxylase (1.14.13.109) [N1204]
C12Y114/13110 . . Geranylgeraniol 18-hydroxylase (1.14.13.110) [N1202]
C12Y114/13111 . . Methanesulfonate monooxygenase (1.14.13.111) [N1204]
C12Y114/13112 . . 3-Epi-6-deoxocathasterone 23-monooxygenase (1.14.13.112) [N1204]
C12Y114/13113 . . FAD-dependent urate hydroxylase (1.14.13.113) [N1204]
C12Y114/13114 . . 6-Hydroxynicotinate 3-monooxygenase (1.14.13.114) [N1204]
C12Y114/13115 . . Angelicin synthase (1.14.13.115) [N1204]
C12Y114/13116 . . Geranylhydroquinone 3''-hydroxylase (1.14.13.116) [N1204]
C12Y114/13117 . . Isoleucine N-monooxygenase (1.14.13.117) [N1204]
C12Y114/13118 . . Valine N-monooxygenase (1.14.13.118) [N1204]
C12Y114/13119 . . 5-Epiaristolochene 1,3-dihydroxylase (1.14.13.119) [N1204]
C12Y114/13120 . . Costunolide synthase (1.14.13.120) [N1204]
C12Y114/13121 . . Premnaspirodiene oxygenase (1.14.13.121) [N1204]
C12Y114/13122 . . Chlorophyllide-a oxygenase (1.14.13.122) [N1204]
C12Y114/13123 . . Germacrene A hydroxylase (1.14.13.123) [N1204]
C12Y114/13124 . . Phenylalanine N-monooxygenase (1.14.13.124) [N1204]
C12Y114/13125 . . Tryptophan N-monooxygenase (1.14.13.125) [N1204]
C12Y114/13126 . . Vitamin D3 24-hydroxylase (1.14.13.126) [N1204]
C12Y114/13127 . . 3-(3-Hydroxy-phenyl)propanoic acid hydroxylase (1.14.13.127) [N1204]
C12Y114/13128 . . 7-Methylxanthine demethylase (1.14.13.128) [N1204]
C12Y114/13129 . . Beta-carotene 3-hydroxylase (1.14.13.129) [N1204]
C12Y114/13130 . . Pyrrole-2-carboxylate monooxygenase (1.14.13.130) [N1204]
C12Y114/13131 . . Dimethyl-sulfide monooxygenase (1.14.13.131) [N1204]
C12Y114/13132 . . Squalene monooxygenase (1.14.13.132) [N1204]
C12Y114/13133 . . Pentalenene oxygenase (1.14.13.133) [N1204]
C12Y114/13134 . . Beta-amyrin 11-oxidase (1.14.13.134) [N1204]
C12Y114/13135 . . 1-Hydroxy-2-naphthoate hydroxylase (1.14.13.135) [N1204]
C12Y114/13136 . . Isoflavonoid synthase (1.14.13.136) [N1204]
C12Y114/13810 . . L-Ornithine N5-monooxygenase (1.14.13.B10) [N1202]

C12Y114/14 . with reduced flavin or flavoprotein as one donor, and incorporation of one atom of oxygen (1.14.14) [N1202]
C12Y114/14001 . . Unspecific monooxygenase (1.14.14.1) [N1202]
C12Y114/14003 . . Alkanal monooxygenase FMN (1.14.14.3), i.e. bacterial-luciferase [N1202]
C12Y114/14005 . . Alkanesulfonate monooxygenase (1.14.14.5) [N1204]
C12Y114/14007 . . Tryptophan 7-halogenase (1.14.14.7) [N1204]
C12Y114/14008 . . Anthranilate 3-monooxygenase (FAD) (1.14.14.8) [N1204]
C12Y114/14009 . . 4-Hydroxyphenylacetate 3-monooxygenase (1.14.14.9) [N1204]

C12Y114/14010 . . Nitrilotriacetate monooxygenase (1.14.14.10) [N1204]
C12Y114/14011 . . Styrene monooxygenase (1.14.14.11) [N1204]
C12Y114/14012 . . 3-Hydroxy-9,10-seconandrost-1,3,5(10)-triene-9,17-dione monooxygenase (1.14.14.12) [N1204]

C12Y114/15 . with reduced iron-sulfur protein as one donor, and incorporation of one atom of oxygen (1.14.15) [N1202]
C12Y114/15001 . . Camphor 5-monooxygenase (1.14.15.1) [N1204]
C12Y114/15002 . . Camphor 1,2-monooxygenase (1.14.15.2) [N1204]
C12Y114/15003 . . Alkane 1-monooxygenase (1.14.15.3) [N1202]
C12Y114/15004 . . Steroid 11-beta-monooxygenase (1.14.15.4) [N1202]
C12Y114/15005 . . Corticosterone 18-monooxygenase (1.14.15.5) [N1204]
C12Y114/15006 . . Cholesterol monooxygenase (side-chain-cleaving) (1.14.15.6), i.e. cytochrome P450scc [N1202]
C12Y114/15007 . . Choline monooxygenase (1.14.15.7) [N1204]
C12Y114/15008 . . Steroid 15-beta-monooxygenase (1.14.15.8) [N1204]
C12Y114/15802 . . Spheroidene monooxygenase (1.14.15.B2), i.e. acyclic carotenoid 2-ketolase [N1202]

C12Y114/16 . with reduced pteridine as one donor, and incorporation of one atom of oxygen (1.14.16) [N1202]
C12Y114/16001 . . Phenylalanine 4-monooxygenase (1.14.16.1) [N1202]
C12Y114/16002 . . Tyrosine 3-monooxygenase (1.14.16.2) [N1202]
C12Y114/16003 . . Anthranilate 3-monooxygenase (1.14.16.3) [N1204]
C12Y114/16004 . . Tryptophan 5-monooxygenase (1.14.16.4) [N1204]
C12Y114/16005 . . Alkylglycerol monooxygenase (1.14.16.5) [N1204]
C12Y114/16006 . . Mandelate 4-monooxygenase (1.14.16.6) [N1204]

C12Y114/17 . with reduced ascorbate as one donor, and incorporation of one atom of oxygen (1.14.17) [N1202]
C12Y114/17001 . . Dopamine beta-monooxygenase (1.14.17.1) [N1204]
C12Y114/17003 . . Peptidylglycine monooxygenase (1.14.17.3) [N1202]
C12Y114/17004 . . Aminocyclopropanecarboxylate oxidase (1.14.17.4), i.e. ethylene-forming enzyme [N1202]

C12Y114/18 . with another compound as one donor, and incorporation of one atom of oxygen (1.14.18) [N1202]
C12Y114/18001 . . Monophenol monooxygenase (1.14.18.1) [N1202]
C12Y114/18002 . . CMP-N-acetylneuraminate monooxygenase (1.14.18.2) [N1202]
C12Y114/18003 . . Methane monooxygenase (particulate) (1.14.18.3) [N1204]

C12Y114/19 . with oxidation of a pair of donors resulting in the reduction of molecular oxygen to two molecules of water (1.14.19) [N1202]
C12Y114/19001 . . Stearoyl-CoA 9-desaturase (1.14.19.1), i.e. DELTA9-desaturase [N1202]
C12Y114/19002 . . Acyl-[acyl-carrier-protein] desaturase (1.14.19.2) [N1202]
C12Y114/19003 . . Linoleoyl-CoA desaturase (1.14.19.3) [N1202]
C12Y114/19004 . . DELTA8-fatty-acid desaturase (1.14.19.4) [N1202]

C12Y114/19005 . . DELTA11-fatty-acid desaturase (1.14.19.5) [N1202]
C12Y114/19006 . . DELTA12-fatty-acid desaturase (1.14.19.6), i.e. oleoyl-CoA DELTA12 desaturase [N1202]
C12Y114/19007 . . (S)-2-Hydroxypropylphosphonic acid epoxidase (1.14.19.7) [N1202]

C12Y114/20 . with 2-oxoglutarate as one donor, and the other dehydrogenated (1.14.20) [N1202]
C12Y114/20001 . . Deacetoxycephalosporin-C synthase (1.14.20.1) [N1202]

C12Y114/21 . with NADH or NADPH as one donor, and the other dehydrogenated (1.14.21) [N1202]
C12Y114/21001 . . (S)-Stylopine synthase (1.14.21.1) [N1204]
C12Y114/21002 . . (S)-Cheilanthifoline synthase (1.14.21.2) [N1204]
C12Y114/21003 . . Berbamunine synthase (1.14.21.3) [N1204]
C12Y114/21004 . . Salutaridine synthase (1.14.21.4) [N1204]
C12Y114/21005 . . (S)-Canadine synthase (1.14.21.5) [N1204]
C12Y114/21006 . . Lathosterol oxidase (1.14.21.6), i.e. C-5 sterol desaturase [N1202]
C12Y114/21007 . . Biflaviolin synthase (1.14.21.7) [N1204]
C12Y114/21008 . . Pseudobaptigenin synthase (1.14.21.8) [N1204]

C12Y114/99 . Miscellaneous (1.14.99) [N1202]
C12Y114/99001 . . Prostaglandin-endoperoxide synthase (1.14.99.1), i.e. cyclooxygenase [N1202]
C12Y114/99002 . . Kynurenine 7,8-hydroxylase (1.14.99.2) [N1204]
C12Y114/99003 . . Heme oxygenase (1.14.99.3) [N1202]
C12Y114/99004 . . Progesterone monooxygenase (1.14.99.4) [N1204]
C12Y114/99007 . . Squalene monooxygenase (1.14.99.7) [N1202]
C12Y114/99009 . . Steroid 17-alpha-monooxygenase (1.14.99.9), i.e. cytochrome-P450-steroid-17-alpha-hydroxylase [N1202]
C12Y114/99010 . . Steroid 21-monooxygenase (1.14.99.10), i.e. steroid cytochrome P450 21-hydroxylase [N1202]
C12Y114/99011 . . Estradiol 6-beta-monooxygenase (1.14.99.11) [N1204]
C12Y114/99012 . . Androst-4-ene-3,17-dione monooxygenase (1.14.99.12) [N1204]
C12Y114/99014 . . Progesterone 11-alpha-monooxygenase (1.14.99.14) [N1204]
C12Y114/99015 . . 4-Methoxybenzoate monooxygenase (O-demethylating) (1.14.99.15) [N1204]
C12Y114/99019 . . Plasmanylethanolamine desaturase (1.14.99.19) [N1204]
C12Y114/99020 . . Phylloquinone monooxygenase (2,3-epoxidizing) (1.14.99.20) [N1202]
C12Y114/99021 . . Latia-luciferin monooxygenase (demethylating) (1.14.99.21), i.e. Latia luciferase [N1202]
C12Y114/99022 . . Ecdysone 20-monooxygenase (1.14.99.22) [N1204]
C12Y114/99023 . . 3-Hydroxybenzoate 2-monooxygenase (1.14.99.23) [N1202]
C12Y114/99024 . . Steroid 9-alpha-monooxygenase (1.14.99.24) [N1204]
C12Y114/99026 . . 2-Hydroxypyridine 5-monooxygenase (1.14.99.26) [N1204]
C12Y114/99027 . . Juglone 3-monooxygenase (1.14.99.27) [N1204]
C12Y114/99028 . . Linalool 8-monooxygenase (1.14.99.28) [N1204]
C12Y114/99029 . . Deoxyhypusine monooxygenase (1.14.99.29) [N1204]
C12Y114/99031 . . Myristoyl-CoA 11-(E) desaturase (1.14.99.31) [N1204]

C12Y114/99032 . . Myristoyl-CoA 11-(Z) desaturase (1.14.99.32) [N1204]
C12Y114/99033 . . DELTA12-fatty acid dehydrogenase (1.14.99.33) [N1204]
C12Y114/99034 . . Monoprenyl isoflavone epoxidase (1.14.99.34) [N1202]
C12Y114/99035 . . Thiophene-2-carbonyl-CoA monooxygenase (1.14.99.35) [N1204]
C12Y114/99036 . . Beta-carotene 15,15'-monooxygenase (1.14.99.36) [N1204]
C12Y114/99037 . . Taxadiene 5-alpha-hydroxylase (1.14.99.37) [N1204]
C12Y114/99038 . . Cholesterol 25-hydroxylase (1.14.99.38) [N1204]
C12Y114/99039 . . Ammonia monooxygenase (1.14.99.39) [N1204]
C12Y114/99040 . . 5,6-Dimethylbenzimidazole synthase (1.14.99.40) [N1204]
C12Y114/99041 . . All-trans-8'-apo-beta-carotenal 15,15'-oxygenase (1.14.99.41) [N1204]
C12Y114/99042 . . Zeaxanthin 7,8-dioxygenase (1.14.99.42) [N1204]
C12Y114/99043 . . Beta-amyrin 24-hydroxylase (1.14.99.43) [N1204]
C12Y114/99044 . . Diapolycopene oxygenase (1.14.99.44) [N1204]
C12Y114/99045 . . Carotene epsilon-monooxygenase (1.14.99.45) [N1204]

C12Y115/00 Oxidoreductases acting on superoxide as acceptor (1.15) [N1202]

C12Y115/01 . with NAD or NADP as acceptor (1.15.1) [N1202]
C12Y115/01001 . . Superoxide dismutase (1.15.1.1) [N1202]
C12Y115/01002 . . Superoxide reductase (1.15.1.2) [N1204]

C12Y116/00 Oxidoreductases oxidizing metal ions (1.16) [N1202]

C12Y116/01 . with NAD+ or NADP+ as acceptor (1.16.1) [N1202]
C12Y116/01001 . . Mercury(II) reductase (1.16.1.1) [N1202]
C12Y116/01002 . . Diferric-transferrin reductase (1.16.1.2) [N1204]
C12Y116/01003 . . Aquacobalamin reductase (1.16.1.3) [N1204]
C12Y116/01004 . . Cob(II)alamin reductase (1.16.1.4) [N1204]
C12Y116/01005 . . Aquacobalamin reductase (NADPH) (1.16.1.5) [N1204]
C12Y116/01006 . . Cyanocobalamin reductase (cyanide-eliminating) (1.16.1.6) [N1204]
C12Y116/01007 . . Ferric-chelate reductase (NADH) (1.16.1.7) [N1204]
C12Y116/01008 . . [Methionine synthase reductase (1.16.1.8) [N1204]
C12Y116/01009 . . Ferric-chelate reductase (NADPH) (1.16.1.9) [N1204]

C12Y116/03 . with oxygen as acceptor (1.16.3) [N1202]
C12Y116/03001 . . Ferroxidase (1.16.3.1), i.e. ceruloplasmin [N1202]

C12Y116/05 . with a quinone or similar compound as acceptor (1.16.5) [N1204]
C12Y116/05001 . . Ascorbate ferrireductase (transmembrane) (1.16.5.1) [N1204]

C12Y116/08 . with flavin as acceptor (1.16.8) [N1204]
C12Y116/08001 . . Cob(II)yrinic acid a,c-diamide reductase (1.16.8.1) [N1204]

C12Y116/09 . with a copper protein as acceptor (1.16.9) [N1204]

C12Y116/09001 . . Iron:rusticyanin reductase (1.16.9.1) [N1204]

C12Y116/98 . with other, known, acceptors (1.16.98) [N1204]

C12Y117/00 Oxidoreductases acting on CH or CH2 groups (1.17) [N1202]

C12Y117/01 . with NAD+ or NADP+ as acceptor (1.17.1) [N1204]
C12Y117/01001 . . CDP-4-dehydro-6-deoxyglucose reductase (1.17.1.1) [N1204]
C12Y117/01002 . . 4-Hydroxy-3-methylbut-2-enyl diphosphate reductase (1.17.1.2) [N1204]
C12Y117/01003 . . Leucoanthocyanidin reductase (1.17.1.3) [N1204]
C12Y117/01004 . . Xanthine dehydrogenase (1.17.1.4) [N1204]
C12Y117/01005 . . Nicotinate dehydrogenase (1.17.1.5) [N1204]
C12Y117/01007 . . 3-Oxo-5,6-dehydrosuberyl-CoA semialdehyde dehydrogenase (1.17.1.7) [N1204]

C12Y117/02 . with a cytochrome as acceptor (1.17.2) [N1204]
C12Y117/02001 . . Nicotinate dehydrogenase (cytochrome) (1.17.2.1) [N1204]

C12Y117/03 . with oxygen as acceptor (1.17.3) [N1202]
C12Y117/03001 . . Pteridine oxidase (1.17.3.1) [N1204]
C12Y117/03002 . . Xanthine oxidase (1.17.3.2) [N1202]
C12Y117/03003 . . 6-Hydroxynicotinate dehydrogenase (1.17.3.3) [N1204]

C12Y117/04 . with a disulfide as acceptor (1.17.3) [N1202]
C12Y117/04001 . . Ribonucleoside-diphosphate reductase (1.17.4.1) [N1202]
C12Y117/04002 . . Ribonucleoside-triphosphate reductase (1.17.4.2) [N1202]

C12Y117/05 . with a quinone or similar compound as acceptor (1.17.5) [N1204]
C12Y117/05001 . . Phenylacetyl-CoA dehydrogenase (1.17.5.1) [N1204]
C12Y117/05002 . . Caffeine dehydrogenase (1.17.5.2) [N1204]

C12Y117/07 . with an iron-sulfur protein as acceptor (1.17.7) [N1204]
C12Y117/07001 . . (E)-4-Hydroxy-3-methylbut-2-enyl-diphosphate synthase (1.17.7.1) [N1204]
C12Y117/07002 . . 7-Hydroxymethyl chlorophyll a reductase (1.17.7.2) [N1204]

C12Y117/99 . with other acceptors (1.17.99) [N1204]
C12Y117/99001 . . 4-Methylphenol dehydrogenase (hydroxylating) (1.17.99.1) [N1204]
C12Y117/99002 . . Ethylbenzene hydroxylase (1.17.99.2) [N1204]
C12Y117/99003 . . 3-Alpha,7-alpha,12-alpha-trihydroxy-5-beta-cholestanoyl-CoA 24-hydroxylase (1.17.99.3) [N1204]
C12Y117/99004 . . Uracil/thymine dehydrogenase (1.17.99.4) [N1204]
C12Y117/99005 . . Bile-acid 7-alpha-dehydroxylase (1.17.99.5) [N1204]

C12Y118/00 Oxidoreductases acting on iron-sulfur proteins as donors (1.18) [N1202]

C12Y118/01 . with NAD+ or NADP+ as acceptor (1.18.1) [N1202]

C12Y118/01001 . . Rubredoxin--NAD+ reductase (1.18.1.1) [N1204]
C12Y118/01002 . . Ferredoxin-NADP+ reductase (1.18.1.2) [N1202]
C12Y118/01003 . . Ferredoxin--NAD+ reductase (1.18.1.3) [N1204]
C12Y118/01004 . . Rubredoxin--NAD(P)+ reductase (1.18.1.4) [N1204]

C12Y118/06 . with dinitrogen as acceptor (1.18.6) [N1202]
C12Y118/06001 . . Nitrogenase (1.18.6.1) [N1202]

C12Y119/00 **Oxidoreductases acting on reduced flavodoxin as donor (1.19)** [N1202]

C12Y119/06 . with dinitrogen as acceptor (1.19.6) [N1202]
C12Y119/06001 . . Nitrogenase (flavodoxin) (1.19.6.1) [N1202]

C12Y120/00 **Oxidoreductases acting on phosphorus or arsenic in donors (1.20)** [N1202]

C12Y120/01 . with NAD+ or NADP+ as acceptor (1.20.1) [N1204]
C12Y120/01001 . . Phosphonate dehydrogenase (1.20.1.1) [N1204]

C12Y120/02 . with a cytochrome as acceptor (1.20.2) [N1204]
C12Y120/02001 . . Arsenate reductase (cytochrome c) (1.20.2.1) [N1204]

C12Y120/04 . acting on phosphorus or arsenic in donors, with disulfide as acceptor (1.20.4) [N1202]
C12Y120/04001 . . Arsenate reductase (1.20.4.1), i.e. glutaredoxin [N1202]
C12Y120/04002 . . Methylarsonate reductase (1.20.4.2) [N1204]
C12Y120/04003 . . Mycoredoxin (1.20.4.3) [N1204]

C12Y120/09 . with a copper protein as acceptor (1.20.9) [N1204]
C12Y120/09001 . . Arsenate reductase (azurin) (1.20.9.1) [N1204]

C12Y120/99 . with other acceptors (1.20.99) [N1204]
C12Y120/99001 . . Arsenate reductase (donor) (1.20.99.1) [N1204]

C12Y121/00 **Oxidoreductases acting on X-H and Y-H to form an X-Y bond (1.21)** [N1202]

C12Y121/03 . with oxygen as acceptor (1.21.3) [N1204]
C12Y121/03001 . . Isopenicillin-N synthase (1.21.3.1) [N1204]
C12Y121/03002 . . Columbamine oxidase (1.21.3.2) [N1204]
C12Y121/03003 . . Reticuline oxidase (1.21.3.3) [N1204]
C12Y121/03004 . . Sulochrin oxidase ((+)-bisdechlorogeodin-forming) (1.21.3.4) [N1204]
C12Y121/03005 . . Sulochrin oxidase ((-)-bisdechlorogeodin-forming) (1.21.3.5) [N1204]
C12Y121/03006 . . Aureusidin synthase (1.21.3.6) [N1204]

C12Y121/04 . with a disulfide as acceptor (1.21.4) [N1204]
C12Y121/04001 . . D-Proline reductase (dithiol) (1.21.4.1) [N1204]
C12Y121/04002 . . Glycine reductase (1.21.4.2) [N1204]

C12Y121/04003 . . Sarcosine reductase (1.21.4.3) [N1204]
C12Y121/04004 . . Betaine reductase (1.21.4.4) [N1204]

C12Y121/99 . with other acceptors (1.21.99) [N1204]
C12Y121/99001 . . Beta-cyclopiazonate dehydrogenase (1.21.99.1) [N1204]

C12Y122/00 Oxidoreductases acting on halogen in donors (1.22) [N1202]

C12Y122/01 . with NAD+ or NADP+ as acceptor (1.22.1) [N1204]
C12Y122/01001 . . Iodotyrosine deiodinase (1.22.1.1) [N1204]

C12Y197/00 Other oxidoreductases (1.97) [N1202]

C12Y197/01 . other oxidoreductases (1.97.1) [N1202]
C12Y197/01001 . . Chlorate reductase (1.97.1.1) [N1204]
C12Y197/01002 . . Pyrogallol hydroxytransferase (1.97.1.2) [N1204]
C12Y197/01003 . . Sulfur reductase (1.97.1.3) [N1204]
C12Y197/01004 . . [Formate-C-acetyltransferase-activating enzyme (1.97.1.4) [N1204]
C12Y197/01008 . . Tetrachloroethene reductive dehalogenase (1.97.1.8) [N1202]
C12Y197/01009 . . Selenate reductase (1.97.1.9) [N1202]
C12Y197/01010 . . Thyroxine 5'-deiodinase (1.97.1.10), i.e. deiodinase I or II [N1202]
C12Y197/01011 . . Thyroxine 5-deiodinase (1.97.1.11), i.e. deiodinase III [N1202]
C12Y197/01012 . . Photosystem I (1.97.1.12) [N1204]

C12Y201/00 Transferases transferring one-carbon groups (2.1) [N1202]

C12Y201/01 . Methyltransferases (2.1.1) [N1202]
C12Y201/01001 . . Nicotinamide N-methyltransferase (2.1.1.1) [N1204]
C12Y201/01002 . . Guanidinoacetate N-methyltransferase (2.1.1.2) [N1204]
C12Y201/01003 . . Thetin--homocysteine S-methyltransferase (2.1.1.3) [N1204]
C12Y201/01004 . . Acetylserotonin O-methyltransferase (2.1.1.4) [N1204]
C12Y201/01005 . . Betaine--homocysteine S-methyltransferase (2.1.1.5) [N1204]
C12Y201/01006 . . Catechol O-methyltransferase (2.1.1.6) [N1202]
C12Y201/01007 . . Nicotinate N-methyltransferase (2.1.1.7) [N1204]
C12Y201/01008 . . Histamine N-methyltransferase (2.1.1.8) [N1204]
C12Y201/01009 . . Thiol S-methyltransferase (2.1.1.9) [N1204]
C12Y201/01010 . . Homocysteine S-methyltransferase (2.1.1.10) [N1204]
C12Y201/01011 . . Magnesium protoporphyrin IX methyltransferase (2.1.1.11) [N1204]
C12Y201/01012 . . Methionine S-methyltransferase (2.1.1.12) [N1204]
C12Y201/01013 . . Methionine synthase (2.1.1.13) [N1204]
C12Y201/01014 . . 5-Methyltetrahydropteroyltriglutamate--homocysteine S-methyltransferase (2.1.1.14) [N1204]
C12Y201/01015 . . Fatty-acid O-methyltransferase (2.1.1.15) [N1204]

C12Y201/01016 . . Methylene-fatty-acyl-phospholipid synthase (2.1.1.16) [N1204]
C12Y201/01017 . . Phosphatidylethanolamine N-methyltransferase (2.1.1.17) [N1202]
C12Y201/01018 . . Polysaccharide O-methyltransferase (2.1.1.18) [N1204]
C12Y201/01019 . . Trimethylsulfonium--tetrahydrofolate N-methyltransferase (2.1.1.19) [N1204]
C12Y201/01020 . . Glycine N-methyltransferase (2.1.1.20) [N1204]
C12Y201/01021 . . Methylamine--glutamate N-methyltransferase (2.1.1.21) [N1204]
C12Y201/01022 . . Carnosine N-methyltransferase (2.1.1.22) [N1204]
C12Y201/01023 . . Protein-arginine N-methyltransferase (2.1.1.23) (C12Y201/01124-C12Y201/01126 take precedence) [N1204]
C12Y201/01024 . . Protein-gamma-glutamate O-methyltransferase (2.1.1.24) (C12Y201/01077, C12Y201/01080, C12Y201/01100 take precedence) [N1204]
C12Y201/01025 . . Phenol O-methyltransferase (2.1.1.25) [N1204]
C12Y201/01026 . . Iodophenol O-methyltransferase (2.1.1.26) [N1204]
C12Y201/01027 . . Tyramine N-methyltransferase (2.1.1.27) [N1204]
C12Y201/01028 . . Phenylethanolamine N-methyltransferase (2.1.1.28) [N1204]
C12Y201/01029 . . tRNA (cytosine-5-)-methyltransferase (2.1.1.29) (C12Y201/01202-C12Y201/01204 take precedence) [N1204]
C12Y201/01031 . . tRNA (guanine-N1-)-methyltransferase (2.1.1.31) (C12Y201/01221, C12Y201/01228 take precedence) [N1204]
C12Y201/01032 . . tRNA (guanine-N2-)-methyltransferase (2.1.1.32) (C12Y201/01213-C12Y201/01216 take precedence) [N1204]
C12Y201/01033 . . tRNA (guanine-N7-)-methyltransferase (2.1.1.33) [N1202]
C12Y201/01034 . . tRNA (guanosine18-2'-O)-methyltransferase (2.1.1.34) [N1204]
C12Y201/01035 . . tRNA (uracil-5-)-methyltransferase (2.1.1.35) [N1204]
C12Y201/01036 . . tRNA (adenine-N1-)-methyltransferase (2.1.1.36) (C12Y201/01217-C12Y201/01220 take precedence) [N1204]
C12Y201/01037 . . DNA (cytosine-5-)-methyltransferase (2.1.1.37) [N1202]
C12Y201/01038 . . O-Demethylpuromycin O-methyltransferase (2.1.1.38) [N1204]
C12Y201/01039 . . Inositol 3-methyltransferase (2.1.1.39) [N1204]
C12Y201/01040 . . Inositol 1-methyltransferase (2.1.1.40) [N1204]
C12Y201/01041 . . Sterol 24-C-methyltransferasee (2.1.1.41) [N1202]
C12Y201/01042 . . Flavone 3'-O-methyltransferase (2.1.1.42) [N1204]
C12Y201/01043 . . Histone-lysine N-methyltransferase (2.1.1.43) [N1202]
C12Y201/01044 . . Dimethylhistidine N-methyltransferase (2.1.1.44) [N1204]
C12Y201/01045 . . Thymidylate synthase (2.1.1.45) [N1202]
C12Y201/01046 . . Isoflavone 4'-O-methyltransferase (2.1.1.46) [N1204]
C12Y201/01047 . . Indolepyruvate C-methyltransferase (2.1.1.47) [N1204]
C12Y201/01048 . . rRNA (adenine-N6-)-methyltransferase (2.1.1.48) (C12Y201/01181-C12Y201/01184 take precedence) [N1204]
C12Y201/01049 . . Amine N-methyltransferase (2.1.1.49) [N1202]
C12Y201/01050 . . Loganate O-methyltransferase (2.1.1.50) [N1204]
C12Y201/01051 . . rRNA (guanine-N1-)-methyltransferase (2.1.1.51) (C12Y201/01187, C12Y201/01188 take precedence) [N1204]
C12Y201/01052 . . rRNA (guanine-N2-)-methyltransferase (2.1.1.52) (C12Y201/01171-C12Y201/01174 take precedence) [N1204]

C12Y201/01053 . . Putrescine N-methyltransferase (2.1.1.53) [N1204]
C12Y201/01054 . . Deoxycytidylate C-methyltransferase (2.1.1.54) [N1204]
C12Y201/01055 . . tRNA (adenine-N6-)-methyltransferase (2.1.1.55) [N1204]
C12Y201/01056 . . mRNA (guanine-N7-)-methyltransferase (2.1.1.56) [N1204]
C12Y201/01057 . . mRNA (nucleoside-2'-O-)-methyltransferase (2.1.1.57) [N1204]
C12Y201/01059 . . [Cytochrome c-lysine N-methyltransferase (2.1.1.59) [N1204]
C12Y201/01060 . . Calmodulin-lysine N-methyltransferase (2.1.1.60) [N1204]
C12Y201/01061 . . tRNA (5-methylaminomethyl-2-thiouridylate)-methyltransferase (2.1.1.61) [N1202]
C12Y201/01062 . . mRNA (2'-O-methyladenosine-N6-)-methyltransferase (2.1.1.62) [N1204]
C12Y201/01063 . . Methylated-DNA-[protein]-cysteine S-methyltransferase (2.1.1.63), i.e. O6-methylguanine-DNA methyltransferase [N1202]
C12Y201/01064 . . 3-Demethylubiquinol 3-O-methyltransferase (2.1.1.64) [N1204]
C12Y201/01065 . . Licodione 2'-O-methyltransferase (2.1.1.65) [N1204]
C12Y201/01066 . . rRNA (adenosine-2'-O-)-methyltransferase (2.1.1.66) [N1202]
C12Y201/01067 . . Thiopurine S-methyltransferase (2.1.1.67) [N1202]
C12Y201/01068 . . Caffeate O-methyltransferase (2.1.1.68) [N1204]
C12Y201/01069 . . 5-Hydroxyfuranocoumarin 5-O-methyltransferase (2.1.1.69) [N1204]
C12Y201/01070 . . 8-Hydroxyfuranocoumarin 8-O-methyltransferase (2.1.1.70) [N1204]
C12Y201/01071 . . Phosphatidyl-N-methylethanolamine N-methyltransferase (2.1.1.71) [N1204]
C12Y201/01072 . . Site-specific DNA-methyltransferase (adenine-specific) (2.1.1.72) [N1204]
C12Y201/01074 . . Methylenetetrahydrofolate--tRNA-(uracil54-C5)-methyltransferase (FADH2-oxidizing) (2.1.1.74) [N1204]
C12Y201/01075 . . Apigenin 4'-O-methyltransferase (2.1.1.75) [N1204]
C12Y201/01076 . . Quercetin 3-O-methyltransferase (2.1.1.76) [N1204]
C12Y201/01077 . . Protein-L-isoaspartate(D-aspartate) O-methyltransferase (2.1.1.77) [N1204]
C12Y201/01078 . . Isoorientin 3'-O-methyltransferase (2.1.1.78) [N1204]
C12Y201/01079 . . Cyclopropane-fatty-acyl-phospholipid synthase (2.1.1.79) [N1204]
C12Y201/01080 . . Protein-glutamate O-methyltransferase (2.1.1.80) [N1204]
C12Y201/01082 . . 3-Methylquercetin 7-O-methyltransferase (2.1.1.82) [N1204]
C12Y201/01083 . . 3,7-Dimethylquercetin 4'-O-methyltransferase (2.1.1.83) [N1204]
C12Y201/01084 . . Methylquercetagetin 6-O-methyltransferase (2.1.1.84) [N1204]
C12Y201/01085 . . Protein-histidine N-methyltransferase (2.1.1.85) [N1204]
C12Y201/01086 . . Tetrahydromethanopterin S-methyltransferase (2.1.1.86) [N1204]
C12Y201/01087 . . Pyridine N-methyltransferase (2.1.1.87) [N1204]
C12Y201/01088 . . 8-Hydroxyquercetin 8-O-methyltransferase (2.1.1.88) [N1204]
C12Y201/01089 . . Tetrahydrocolumbamine 2-O-methyltransferase (2.1.1.89) [N1204]
C12Y201/01090 . . Methanol--5-hydroxybenzimidazolylcobamide Co-methyltransferase (2.1.1.90) [N1204]
C12Y201/01091 . . Isobutyraldoxime O-methyltransferase (2.1.1.91) [N1204]
C12Y201/01094 . . Tabersonine 16-O-methyltransferase (2.1.1.94) [N1204]
C12Y201/01095 . . Tocopherol O-methyltransferase (2.1.1.95) [N1204]
C12Y201/01096 . . Thioether S-methyltransferase (2.1.1.96) [N1204]
C12Y201/01097 . . 3-Hydroxyanthranilate 4-C-methyltransferase (2.1.1.97) [N1204]

C12Y201/01098 . . Diphthine synthase (2.1.1.98) [N1204]
C12Y201/01099 . . 3-Hydroxy-16-methoxy-2,3-dihydrotabersonine N-methyltransferase (2.1.1.99) [N1204]
C12Y201/01100 . . Protein-S-isoprenylcysteine O-methyltransferase (2.1.1.100) [N1202]
C12Y201/01101 . . Macrocin O-methyltransferase (2.1.1.101) [N1204]
C12Y201/01102 . . Demethylmacrocin O-methyltransferase (2.1.1.102) [N1204]
C12Y201/01103 . . Phosphoethanolamine N-methyltransferase (2.1.1.103) [N1204]
C12Y201/01104 . . Caffeoyl-CoA O-methyltransferase (2.1.1.104) [N1202]
C12Y201/01105 . . N-Benzoyl-4-hydroxyanthranilate 4-O-methyltransferase (2.1.1.105) [N1204]
C12Y201/01106 . . Tryptophan 2-C-methyltransferase (2.1.1.106) [N1204]
C12Y201/01107 . . Uroporphyrinogen-III C-methyltransferase (2.1.1.107) [N1204]
C12Y201/01108 . . 6-Hydroxymellein O-methyltransferase (2.1.1.108) [N1204]
C12Y201/01109 . . Demethylsterigmatocystin 6-O-methyltransferase (2.1.1.109) [N1204]
C12Y201/01110 . . Sterigmatocystin 8-O-methyltransferase (2.1.1.110) [N1204]
C12Y201/01111 . . Anthranilate N-methyltransferase (2.1.1.111) [N1204]
C12Y201/01112 . . Glucuronoxylan 4-O-methyltransferase (2.1.1.112) [N1204]
C12Y201/01113 . . Site-specific DNA-methyltransferase (cytosine-N4-specific) (2.1.1.113) [N1202]
C12Y201/01114 . . Polyprenyldihydroxybenzoate methyltransferase (2.1.1.114) [N1204]
C12Y201/01115 . . (RS)-1-Benzyl-1,2,3,4-tetrahydroisoquinoline N-methyltransferase (2.1.1.115) [N1204]
C12Y201/01116 . . 3'-Hydroxy-N-methyl-(S)-coclaurine 4'-O-methyltransferase (2.1.1.116) [N1204]
C12Y201/01117 . . (S)-Scoulerine 9-O-methyltransferase (2.1.1.117) [N1204]
C12Y201/01118 . . Columbamine O-methyltransferase (2.1.1.118) [N1204]
C12Y201/01119 . . 10-Hydroxydihydrosanguinarine 10-O-methyltransferase (2.1.1.119) [N1204]
C12Y201/01120 . . 12-Hydroxydihydrochelirubine 12-O-methyltransferase (2.1.1.120) [N1204]
C12Y201/01121 . . 6-O-Methylnorlaudanosoline 5'-O-methyltransferase (2.1.1.121) [N1204]
C12Y201/01122 . . (S)-Tetrahydroprotoberberine N-methyltransferase (2.1.1.122) [N1204]
C12Y201/01123 . . [Cytochrome c-methionine S-methyltransferase (2.1.1.123) [N1204]
C12Y201/01124 . . [Cytochrome c-arginine N-methyltransferase (2.1.1.124) [N1204]
C12Y201/01125 . . Histone-arginine N-methyltransferase (2.1.1.125) [N1202]
C12Y201/01126 . . [Myelin basic protein-arginine N-methyltransferase (2.1.1.126) [N1204]
C12Y201/01127 . . [Ribulose-bisphosphate carboxylase-lysine N-methyltransferase (2.1.1.127) [N1204]
C12Y201/01128 . . (RS)-Norcoclaurine 6-O-methyltransferase (2.1.1.128) [N1204]
C12Y201/01129 . . Inositol 4-methyltransferase (2.1.1.129) [N1204]
C12Y201/01130 . . Precorrin-2 C20-methyltransferase (2.1.1.130) [N1204]
C12Y201/01131 . . Precorrin-3B C17-methyltransferase (2.1.1.131) [N1204]
C12Y201/01132 . . Precorrin-6Y C5,15-methyltransferase (decarboxylating) (2.1.1.132) [N1204]
C12Y201/01133 . . Precorrin-4 C11-methyltransferase (2.1.1.133) [N1204]
C12Y201/01136 . . Chlorophenol O-methyltransferase (2.1.1.136) [N1204]
C12Y201/01137 . . Arsenite methyltransferase (2.1.1.137) [N1204]
C12Y201/01139 . . 3'-Demethylstaurosporine O-methyltransferase (2.1.1.139) [N1204]
C12Y201/01140 . . (S)-Coclaurine-N-methyltransferase (2.1.1.140) [N1204]

C12Y201/01141 . . Jasmonate O-methyltransferase (2.1.1.141) [N1202]
C12Y201/01142 . . Cycloartenol 24-C-methyltransferase (2.1.1.142), i.e. sterol C24-methyltransferase [N1202]
C12Y201/01143 . . 24-Methylenesterol C-methyltransferase (2.1.1.143), i.e. DELTA24-sterol methyltransferase [N1202]
C12Y201/01144 . . Trans-aconitate 2-methyltransferase (2.1.1.144) [N1204]
C12Y201/01145 . . Trans-aconitate 3-methyltransferase (2.1.1.145) [N1204]
C12Y201/01146 . . (Iso)eugenol O-methyltransferase (2.1.1.146) [N1204]
C12Y201/01147 . . Corydaline synthase (2.1.1.147) [N1204]
C12Y201/01148 . . Thymidylate synthase (FAD) (2.1.1.148) [N1204]
C12Y201/01149 . . Myricetin O-methyltransferase (2.1.1.149) [N1204]
C12Y201/01150 . . Isoflavone 7-O-methyltransferase (2.1.1.150) [N1204]
C12Y201/01151 . . Cobalt-factor II C20-methyltransferase (2.1.1.151) [N1204]
C12Y201/01152 . . Precorrin-6A synthase (deacetylating) (2.1.1.152) [N1204]
C12Y201/01153 . . Vitexin 2''-O-rhamnoside 7-O-methyltransferase (2.1.1.153) [N1204]
C12Y201/01154 . . Isoliquiritigenin 2'-O-methyltransferase (2.1.1.154) [N1204]
C12Y201/01155 . . Kaempferol 4'-O-methyltransferase (2.1.1.155) [N1204]
C12Y201/01156 . . Glycine/sarcosine N-methyltransferase (2.1.1.156) [N1204]
C12Y201/01157 . . Sarcosine/dimethylglycine N-methyltransferase (2.1.1.157) [N1204]
C12Y201/01158 . . 7-Methylxanthosine synthase (2.1.1.158) [N1204]
C12Y201/01159 . . Theobromine synthase (2.1.1.159) [N1204]
C12Y201/01160 . . Caffeine synthase (2.1.1.160) [N1204]
C12Y201/01161 . . Dimethylglycine N-methyltransferase (2.1.1.161) [N1204]
C12Y201/01162 . . Glycine/sarcosine/dimethylglycine N-methyltransferase (2.1.1.162) [N1204]
C12Y201/01163 . . Demethylmenaquinone methyltransferase (2.1.1.163) [N1204]
C12Y201/01164 . . Demethylrebeccamycin-D-glucose O-methyltransferase (2.1.1.164) [N1204]
C12Y201/01165 . . Methyl halide transferase (2.1.1.165) [N1204]
C12Y201/01166 . . 23S rRNA (uridine2552-2'-O-)-methyltransferase (2.1.1.166) [N1204]
C12Y201/01167 . . 27S pre-rRNA (guanosine2922-2'-O-)-methyltransferase (2.1.1.167) [N1204]
C12Y201/01168 . . 21S rRNA (uridine2791-2'-O-)-methyltransferase (2.1.1.168) [N1204]
C12Y201/01169 . . Tricetin 3',4',5'-O-trimethyltransferase (2.1.1.169) [N1204]
C12Y201/01170 . . 16S rRNA (guanine527-N7)-methyltransferase (2.1.1.170) [N1204]
C12Y201/01171 . . 16S rRNA (guanine966-N2)-methyltransferase (2.1.1.171) [N1204]
C12Y201/01172 . . 16S rRNA (guanine1207-N2)-methyltransferase (2.1.1.172) [N1204]
C12Y201/01173 . . 23S rRNA (guanine2445-N2)-methyltransferase (2.1.1.173) [N1204]
C12Y201/01174 . . 23S rRNA (guanine1835-N2)-methyltransferase (2.1.1.174) [N1204]
C12Y201/01175 . . Tricin synthase (2.1.1.175) [N1204]
C12Y201/01176 . . 16S rRNA (cytosine967-C5)-methyltransferase (2.1.1.176) [N1204]
C12Y201/01177 . . 23S rRNA (pseudouridine1915-N3)-methyltransferase (2.1.1.177) [N1204]
C12Y201/01178 . . 16S rRNA (cytosine1407-C5)-methyltransferase (2.1.1.178) [N1204]
C12Y201/01179 . . 16S rRNA (guanine1405-N7)-methyltransferase (2.1.1.179) [N1204]
C12Y201/01180 . . 16S rRNA (adenine1408-N1)-methyltransferase (2.1.1.180) [N1204]
C12Y201/01181 . . 23S rRNA (adenine1618-N6)-methyltransferase (2.1.1.181) [N1204]

C12Y201/01182 . . 16S rRNA (adenine1518-N6/adenine1519-N6)-dimethyltransferase (2.1.1.182) [N1204]
C12Y201/01183 . . 18S rRNA (adenine1779-N6/adenine1780-N6)-dimethyltransferase (2.1.1.183) [N1204]
C12Y201/01184 . . 23S rRNA (adenine2085-N6)-dimethyltransferase (2.1.1.184) [N1204]
C12Y201/01185 . . 23S rRNA (guanine2251-2'-O)-methyltransferase (2.1.1.185) [N1204]
C12Y201/01186 . . 23S rRNA (cytidine2498-2'-O)-methyltransferase (2.1.1.186) [N1204]
C12Y201/01187 . . 23S rRNA (guanine745-N1)-methyltransferase (2.1.1.187) [N1204]
C12Y201/01188 . . 23S rRNA (guanine748-N1)-methyltransferase (2.1.1.188) [N1204]
C12Y201/01189 . . 23S rRNA (uracil747-C5)-methyltransferase (2.1.1.189) [N1204]
C12Y201/01190 . . 23S rRNA (uracil1939-C5)-methyltransferase (2.1.1.190) [N1204]
C12Y201/01191 . . 23S rRNA (cytosine1962-C5)-methyltransferase (2.1.1.191) [N1204]
C12Y201/01192 . . 23S rRNA (adenine2503-C2)-methyltransferase (2.1.1.192) [N1204]
C12Y201/01193 . . 16S rRNA (uracil1498-N3)-methyltransferase (2.1.1.193) [N1204]
C12Y201/01194 . . 23S rRNA (adenine2503-C2,C8)-dimethyltransferase (2.1.1.194) (C12Y201/01192, C12Y201/01224 take precedence [N1204]
C12Y201/01195 . . Cobalt-precorrin-5B (C1)-methyltransferase (2.1.1.195) [N1204]
C12Y201/01196 . . Cobalt-precorrin-7 (C15)-methyltransferase (decarboxylating) (2.1.1.196) [N1204]
C12Y201/01197 . . Malonyl-CoA O-methyltransferase (2.1.1.197) [N1204]
C12Y201/01198 . . 16S rRNA (cytidine1402-2'-O)-methyltransferase (2.1.1.198) [N1204]
C12Y201/01199 . . 16S rRNA (cytosine1402-N4)-methyltransferase (2.1.1.199) [N1204]
C12Y201/01200 . . tRNA (cytidine32/uridine32-2'-O)-methyltransferase (2.1.1.200) [N1204]
C12Y201/01201 . . 2-Methoxy-6-polyprenyl-1,4-benzoquinol methylase (2.1.1.201) [N1204]
C12Y201/01202 . . Multisite-specific tRNA:(cytosine-C5)-methyltransferase (2.1.1.202) [N1204]
C12Y201/01203 . . tRNA (cytosine34-C5)-methyltransferase (2.1.1.203) [N1204]
C12Y201/01204 . . tRNA (cytosine38-C5)-methyltransferase (2.1.1.204) [N1204]
C12Y201/01205 . . tRNA (cytidine32/guanosine34-2'-O)-methyltransferase (2.1.1.205) [N1204]
C12Y201/01206 . . tRNA (cytidine56-2'-O)-methyltransferase (2.1.1.206) [N1204]
C12Y201/01207 . . tRNA (cytidine34-2'-O)-methyltransferase (2.1.1.207) [N1204]
C12Y201/01208 . . 23S rRNA (uridine2479-2'-O)-methyltransferase (2.1.1.208) [N1204]
C12Y201/01209 . . 23S rRNA (guanine2535-N1)-methyltransferase (2.1.1.209) [N1204]
C12Y201/01210 . . Demethylspheroidene O-methyltransferase (2.1.1.210) [N1204]
C12Y201/01211 . . tRNA(Ser) (uridine44-2'-O-)-methyltransferase (2.1.1.211) [N1204]
C12Y201/01212 . . 2,7,4'-Trihydroxyisoflavanone 4'-O-methyltransferase (2.1.1.212) [N1204]
C12Y201/01213 . . tRNA (guanine10-N2)-dimethyltransferase (2.1.1.213) [N1204]
C12Y201/01214 . . tRNA (guanine10-N2)-methyltransferase (2.1.1.214) [N1204]
C12Y201/01215 . . tRNA (guanine26-N2/guanine27-N2)-dimethyltransferase (2.1.1.215) [N1204]
C12Y201/01216 . . tRNA (guanine26-N2)-dimethyltransferase (2.1.1.216) [N1204]
C12Y201/01217 . . tRNA (adenine22-N1)-methyltransferase (2.1.1.217) [N1204]
C12Y201/01218 . . tRNA (adenine9-N1)-methyltransferase (2.1.1.218) [N1204]
C12Y201/01219 . . tRNA (adenine57-N1/adenine58-N1)-methyltransferase (2.1.1.219) [N1204]
C12Y201/01220 . . tRNA (adenine58-N1)-methyltransferase (2.1.1.220) [N1204]
C12Y201/01221 . . tRNA (guanine9-N1)-methyltransferase (2.1.1.221) [N1204]

C12Y201/01222 . . 2-Polyprenyl-6-hydroxyphenyl methylase (2.1.1.222) [N1204]
C12Y201/01223 . . tRNA1(Val) (adenine37-N6)-methyltransferase (2.1.1.223) [N1204]
C12Y201/01224 . . 23S rRNA (adenine2503-C8)-methyltransferase (2.1.1.224) [N1204]
C12Y201/01225 . . tRNA:m4X modification enzyme (2.1.1.225) [N1204]
C12Y201/01226 . . 23S rRNA (cytidine1920-2'-O)-methyltransferase (2.1.1.226) [N1204]
C12Y201/01227 . . 16S rRNA (cytidine1409-2'-O)-methyltransferase (2.1.1.227) [N1204]
C12Y201/01228 . . tRNA (guanine37-N1)-methyltransferase (2.1.1.228) [N1204]
C12Y201/01229 . . tRNA (carboxymethyluridine34-5-O)-methyltransferase (2.1.1.229) [N1204]
C12Y201/01230 . . 23S rRNA (adenosine1067-2'-O)-methyltransferase (2.1.1.230) [N1204]
C12Y201/01231 . . Flavonoid 4'-O-methyltransferase (2.1.1.231) [N1204]
C12Y201/01232 . . Naringenin 7-O-methyltransferase (2.1.1.232) [N1204]
C12Y201/01233 . . [Phosphatase 2A protein-leucine-carboxy methyltransferase (2.1.1.233) [N1204]
C12Y201/01234 . . dTDP-3-amino-3,4,6-trideoxy-alpha-D-glucopyranose N,N-dimethyltransferase (2.1.1.234) [N1204]
C12Y201/01235 . . dTDP-3-amino-3,6-dideoxy-alpha-D-glucopyranose N,N-dimethyltransferase (2.1.1.235) [N1204]
C12Y201/01236 . . dTDP-3-amino-3,6-dideoxy-alpha-D-galactopyranose N,N-dimethyltransferase (2.1.1.236) [N1204]
C12Y201/01237 . . Mycinamicin III 3''-O-methyltransferase (2.1.1.237) [N1204]
C12Y201/01238 . . Mycinamicin VI 2''-O-methyltransferase (2.1.1.238) [N1204]

C12Y201/02 . Hydroxymethyl-, formyl- and related transferases (2.1.2) [N1202]
C12Y201/02001 . . Glycine hydroxymethyltransferase (2.1.2.1) [N1202]
C12Y201/02002 . . Phosphoribosylglycinamide formyltransferase (2.1.2.2) [N1204]
C12Y201/02003 . . Phosphoribosylaminoimidazolecarboxamide formyltransferase (2.1.2.3), i.e. AICAR formyltransferase [N1202]
C12Y201/02004 . . Glycine formimidoyltransferase (2.1.2.4) [N1204]
C12Y201/02005 . . Glutamate formimidoyltransferase (2.1.2.5) [N1202]
C12Y201/02007 . . D-Alanine 2-hydroxymethyltransferase (2.1.2.7) [N1204]
C12Y201/02008 . . Deoxycytidylate 5-hydroxymethyltransferase (2.1.2.8) [N1204]
C12Y201/02009 . . Methionyl-tRNA formyltransferase (2.1.2.9) [N1204]
C12Y201/02010 . . Aminomethyltransferase (2.1.2.10) [N1204]
C12Y201/02011 . . 3-Methyl-2-oxobutanoate hydroxymethyltransferase (2.1.2.11), i.e. ketopantoate hydroxymethyltransferase [N1202]
C12Y201/02013 . . UDP-4-amino-4-deoxy-L-arabinose formyltransferase (2.1.2.13) [N1204]

C12Y201/03 . Carboxy- and carbamoyltransferases (2.1.3) [N1202]
C12Y201/03001 . . Methylmalonyl-CoA carboxytransferase (2.1.3.1) [N1202]
C12Y201/03002 . . Aspartate carbamoyltransferase (2.1.3.2) [N1204]
C12Y201/03003 . . Ornithine carbamoyltransferase (2.1.3.3) [N1204]
C12Y201/03005 . . Oxamate carbamoyltransferase (2.1.3.5) [N1204]
C12Y201/03006 . . Putrescine carbamoyltransferase (2.1.3.6) [N1204]
C12Y201/03007 . . 3-Hydroxymethylcephem carbamoyltransferase (2.1.3.7) [N1204]
C12Y201/03008 . . Lysine carbamoyltransferase (2.1.3.8) [N1204]

C12Y201/03009 . . N-Acetylornithine carbamoyltransferase (2.1.3.9) [N1204]
C12Y201/03010 . . Malonyl-S-ACP:biotin-protein carboxyltransferase (2.1.3.10) [N1204]
C12Y201/03011 . . N-Succinylornithine carbamoyltransferase (2.1.3.11) [N1204]

C12Y201/04 . Amidinotransferases (2.1.4) [N1204]
C12Y201/04001 . . Glycine amidinotransferase (2.1.4.1) [N1204]
C12Y201/04002 . . Scyllo-inosamine-4-phosphate amidinotransferase (2.1.4.2) [N1204]

C12Y202/00 Transferases transferring aldehyde or ketonic groups (2.2) [N1202]

C12Y202/01 . Transketolases and transaldolases (2.2.1) [N1202]
C12Y202/01001 . . Transketolase (2.2.1.1) [N1202]
C12Y202/01002 . . Transaldolase (2.2.1.2) [N1202]
C12Y202/01003 . . Formaldehyde transketolase (2.2.1.3) [N1204]
C12Y202/01004 . . Acetoin--ribose-5-phosphate transaldolase (2.2.1.4) [N1204]
C12Y202/01005 . . 2-Hydroxy-3-oxoadipate synthase (2.2.1.5) [N1204]
C12Y202/01006 . . Acetolactate synthase (2.2.1.6) [N1202]
C12Y202/01007 . . 1-Deoxy-D-xylulose-5-phosphate synthase (2.2.1.7) [N1202]
C12Y202/01008 . . Fluorothreonine transaldolase (2.2.1.8) [N1204]
C12Y202/01009 . . 2-Succinyl-5-enolpyruvyl-6-hydroxy-3-cyclohexene-1-carboxylic-acid synthase (2.2.1.9) [N1204]

C12Y203/00 Acyltransferases (2.3) [N1202]

C12Y203/01 . transferring groups other than amino-acyl groups (2.3.1) [N1202]
C12Y203/01001 . . Amino-acid N-acetyltransferase (2.3.1.1) [N1204]
C12Y203/01002 . . Imidazole N-acetyltransferase (2.3.1.2) [N1204]
C12Y203/01003 . . Glucosamine N-acetyltransferase (2.3.1.3) [N1204]
C12Y203/01004 . . Glucosamine-phosphate N-acetyltransferase (2.3.1.4) [N1204]
C12Y203/01005 . . Arylamine N-acetyltransferase (2.3.1.5) [N1204]
C12Y203/01006 . . Choline O-acetyltransferase (2.3.1.6) [N1204]
C12Y203/01007 . . Carnitine O-acetyltransferase (2.3.1.7) [N1202]
C12Y203/01008 . . Phosphate acetyltransferase (2.3.1.8) [N1202]
C12Y203/01009 . . Acetyl-CoA C-acetyltransferase (2.3.1.9) [N1202]
C12Y203/01010 . . Hydrogen-sulfide S-acetyltransferase (2.3.1.10) [N1204]
C12Y203/01011 . . Thioethanolamine S-acetyltransferase (2.3.1.11) [N1204]
C12Y203/01012 . . Dihydrolipoyllysine-residue acetyltransferase (2.3.1.12) [N1204]
C12Y203/01013 . . Glycine N-acyltransferase (2.3.1.13) [N1202]
C12Y203/01014 . . Glutamine N-phenylacetyltransferase (2.3.1.14) [N1204]
C12Y203/01015 . . Glycerol-3-phosphate O-acyltransferase (2.3.1.15) [N1202]
C12Y203/01016 . . Acetyl-CoA C-acyltransferase (2.3.1.16) [N1202]
C12Y203/01017 . . Aspartate N-acetyltransferase (2.3.1.17) [N1202]
C12Y203/01018 . . Galactoside O-acetyltransferase (2.3.1.18) [N1204]

C12Y203/01019 . . Phosphate butyryltransferase (2.3.1.19) [N1204]
C12Y203/01020 . . Diacylglycerol O-acyltransferase (2.3.1.20) [N1202]
C12Y203/01021 . . Carnitine O-palmitoyltransferase (2.3.1.21) [N1202]
C12Y203/01022 . . 2-Acylglycerol O-acyltransferase (2.3.1.22) [N1202]
C12Y203/01023 . . 1-Acylglycerophosphocholine O-acyltransferase (2.3.1.23), i.e. lysophosphatidylcholine acyltransferase or LPCAT [N1202]
C12Y203/01024 . . Sphingosine N-acyltransferase (2.3.1.24) [N1204]
C12Y203/01025 . . Plasmalogen synthase (2.3.1.25) [N1204]
C12Y203/01026 . . Sterol O-acyltransferase (2.3.1.26) [N1202]
C12Y203/01027 . . Cortisol O-acetyltransferase (2.3.1.27) [N1204]
C12Y203/01028 . . Chloramphenicol O-acetyltransferase (2.3.1.28) [N1202]
C12Y203/01029 . . Glycine C-acetyltransferase (2.3.1.29) [N1204]
C12Y203/01030 . . Serine O-acetyltransferase (2.3.1.30) [N1202]
C12Y203/01031 . . Homoserine O-acetyltransferase (2.3.1.31) [N1204]
C12Y203/01032 . . Lysine N-acetyltransferase (2.3.1.32) [N1204]
C12Y203/01033 . . Histidine N-acetyltransferase (2.3.1.33) [N1204]
C12Y203/01034 . . D-Tryptophan N-acetyltransferase (2.3.1.34) [N1204]
C12Y203/01035 . . Glutamate N-acetyltransferase (2.3.1.35) [N1204]
C12Y203/01036 . . D-Amino-acid N-acetyltransferase (2.3.1.36) [N1204]
C12Y203/01037 . . 5-Aminolevulinate synthase (2.3.1.37) [N1202]
C12Y203/01038 . . [Acyl-carrier-protein S-acetyltransferase (2.3.1.38) [N1204]
C12Y203/01039 . . [Acyl-carrier-protein] S-malonyltransferase (2.3.1.39) [N1202]
C12Y203/01040 . . Acyl-[acyl-carrier-protein--phospholipid O-acyltransferase (2.3.1.40) [N1204]
C12Y203/01041 . . Beta-ketoacyl-acyl-carrier-protein synthase I (2.3.1.41) [N1204]
C12Y203/01042 . . Glycerone-phosphate O-acyltransferase (2.3.1.42) [N1204]
C12Y203/01043 . . Phosphatidylcholine-sterol O-acyltransferase (2.3.1.43), i.e. lecithin-cholesterol acyltransferase or LCAT [N1202]
C12Y203/01044 . . Acetyl-CoA:N-acetylneuraminate 4-O-acetyltransferase (2.3.1.44) [N1202]
C12Y203/01045 . . N-Acetylneuraminate 7-O(or 9-O)-acetyltransferase (2.3.1.45) [N1204]
C12Y203/01046 . . Homoserine O-succinyltransferase (2.3.1.46) [N1204]
C12Y203/01047 . . 8-Amino-7-oxononanoate synthase (2.3.1.47) [N1204]
C12Y203/01048 . . Histone acetyltransferase (2.3.1.48) [N1202]
C12Y203/01049 . . Deacetyl-[citrate-(pro-3S)-lyase S-acetyltransferase (2.3.1.49) [N1204]
C12Y203/01050 . . Serine C-palmitoyltransferase (2.3.1.50) [N1202]
C12Y203/01051 . . 1-Acylglycerol-3-phosphate O-acyltransferase (2.3.1.51) [N1202]
C12Y203/01052 . . 2-Acylglycerol-3-phosphate O-acyltransferase (2.3.1.52) [N1204]
C12Y203/01053 . . Phenylalanine N-acetyltransferase (2.3.1.53) [N1204]
C12Y203/01054 . . Formate C-acetyltransferase (2.3.1.54), i.e. pyruvate formate-lyase or PFL [N1202]
C12Y203/01056 . . Aromatic-hydroxylamine O-acetyltransferase (2.3.1.56) [N1204]
C12Y203/01057 . . Diamine N-acetyltransferase (2.3.1.57) [N1204]
C12Y203/01058 . . 2,3-Diaminopropionate N-oxalyltransferase (2.3.1.58) [N1204]
C12Y203/01059 . . Gentamicin 2'-N-acetyltransferase (2.3.1.59) [N1204]
C12Y203/01060 . . Gentamicin 3'-N-acetyltransferase (2.3.1.60) [N1204]

C12Y203/01061 . . Dihydrolipoyllysine-residue succinyltransferase (2.3.1.61) [N1204]
C12Y203/01062 . . 2-Acylglycerophosphocholine O-acyltransferase (2.3.1.62) [N1204]
C12Y203/01063 . . 1-Alkylglycerophosphocholine O-acyltransferase (2.3.1.63) [N1204]
C12Y203/01064 . . Agmatine N4-coumaroyltransferase (2.3.1.64) [N1202]
C12Y203/01065 . . Bile acid-CoA:amino acid N-acyltransferase (2.3.1.65) [N1204]
C12Y203/01066 . . Leucine N-acetyltransferase (2.3.1.66) [N1204]
C12Y203/01067 . . 1-Alkylglycerophosphocholine O-acetyltransferase (2.3.1.67) [N1204]
C12Y203/01068 . . Glutamine N-acyltransferase (2.3.1.68) [N1204]
C12Y203/01069 . . Monoterpenol O-acetyltransferase (2.3.1.69) [N1204]
C12Y203/01071 . . Glycine N-benzoyltransferase (2.3.1.71) [N1204]
C12Y203/01072 . . Indoleacetylglucose--inositol O-acyltransferase (2.3.1.72) [N1204]
C12Y203/01073 . . Diacylglycerol-sterol O-acyltransferase (2.3.1.73) [N1202]
C12Y203/01074 . . Naringenin-chalcone synthase (2.3.1.74), i.e. chalcone synthase [N1202]
C12Y203/01075 . . Long-chain-alcohol O-fatty-acyltransferase (2.3.1.75) [N1204]
C12Y203/01076 . . Retinol O-fatty-acyltransferase (2.3.1.76) [N1204]
C12Y203/01077 . . Triacylglycerol--sterol O-acyltransferase (2.3.1.77) [N1204]
C12Y203/01078 . . Heparan-alpha-glucosaminide N-acetyltransferase (2.3.1.78) [N1204]
C12Y203/01079 . . Maltose O-acetyltransferase (2.3.1.79) [N1204]
C12Y203/01080 . . Cysteine-S-conjugate N-acetyltransferase (2.3.1.80) [N1204]
C12Y203/01081 . . Aminoglycoside N3'-acetyltransferase (2.3.1.81) [N1204]
C12Y203/01082 . . Aminoglycoside N6'-acetyltransferase (2.3.1.82) [N1204]
C12Y203/01083 . . Phosphatidylcholine--dolichol O-acyltransferase (2.3.1.83) [N1204]
C12Y203/01084 . . Alcohol O-acetyltransferase (2.3.1.84) [N1202]
C12Y203/01085 . . Fatty-acid synthase (2.3.1.85) [N1202]
C12Y203/01086 . . Fatty-acyl-CoA synthase (2.3.1.86) [N1204]
C12Y203/01087 . . Aralkylamine N-acetyltransferase (2.3.1.87) [N1204]
C12Y203/01088 . . Peptide alpha-N-acetyltransferase (2.3.1.88) [N1204]
C12Y203/01089 . . Tetrahydrodipicolinate N-acetyltransferase (2.3.1.89) [N1204]
C12Y203/01090 . . Beta-glucogallin O-galloyltransferase (2.3.1.90) [N1204]
C12Y203/01091 . . Sinapoylglucose--choline O-sinapoyltransferase (2.3.1.91) [N1204]
C12Y203/01092 . . Sinapoylglucose--malate O-sinapoyltransferase (2.3.1.92) [N1204]
C12Y203/01093 . . 13-Hydroxylupanine O-tigloyltransferase (2.3.1.93) [N1204]
C12Y203/01094 . . 6-Deoxyerythronolide-B synthase (2.3.1.94) [N1204]
C12Y203/01095 . . Trihydroxystilbene synthase (2.3.1.95) [N1204]
C12Y203/01096 . . Glycoprotein N-palmitoyltransferase (2.3.1.96) [N1204]
C12Y203/01097 . . Glycylpeptide N-tetradecanoyltransferase (2.3.1.97) [N1204]
C12Y203/01098 . . Chlorogenate--glucarate O-hydroxycinnamoyltransferase (2.3.1.98) [N1204]
C12Y203/01099 . . Quinate O-hydroxycinnamoyltransferase (2.3.1.99) [N1204]
C12Y203/01100 . . [Myelin-proteolipid O-palmitoyltransferase (2.3.1.100) [N1204]
C12Y203/01101 . . Formylmethanofuran--tetrahydromethanopterin N-formyltransferase (2.3.1.101) [N1204]
C12Y203/01102 . . N6-Hydroxylysine O-acetyltransferase (2.3.1.102) [N1204]

C12Y203/01103 . . Sinapoylglucose--sinapoylglucose O-sinapoyltransferase (2.3.1.103) [N1204]
C12Y203/01104 . . 1-Alkenylglycerophosphocholine O-acyltransferase (2.3.1.104) [N1204]
C12Y203/01105 . . Alkylglycerophosphate 2-O-acetyltransferase (2.3.1.105) [N1204]
C12Y203/01106 . . Tartronate O-hydroxycinnamoyltransferase (2.3.1.106) [N1204]
C12Y203/01107 . . Deacetylvindoline O-acetyltransferase (2.3.1.107) [N1204]
C12Y203/01108 . . Alpha-tubulin N-acetyltransferase (2.3.1.108) [N1204]
C12Y203/01109 . . Arginine N-succinyltransferase (2.3.1.109) [N1204]
C12Y203/01110 . . Tyramine N-feruloyltransferase (2.3.1.110) [N1204]
C12Y203/01111 . . Mycocerosate synthase (2.3.1.111) [N1204]
C12Y203/01112 . . D-Tryptophan N-malonyltransferase (2.3.1.112) [N1204]
C12Y203/01113 . . Anthranilate N-malonyltransferase (2.3.1.113) [N1204]
C12Y203/01114 . . 3,4-Dichloroaniline N-malonyltransferase (2.3.1.114) [N1204]
C12Y203/01115 . . Isoflavone-7-O-beta-glucoside 6''-O-malonyltransferase (2.3.1.115) [N1204]
C12Y203/01116 . . Flavonol-3-O-beta-glucoside O-malonyltransferase (2.3.1.116) [N1204]
C12Y203/01117 . . 2,3,4,5-Tetrahydropyridine-2,6-dicarboxylate N-succinyltransferase (2.3.1.117) [N1204]
C12Y203/01118 . . N-Hydroxyarylamine O-acetyltransferase (2.3.1.118) [N1204]
C12Y203/01119 . . Icosanoyl-CoA synthase (2.3.1.119) [N1204]
C12Y203/01121 . . 1-Alkenylglycerophosphoethanolamine O-acyltransferase (2.3.1.121) [N1204]
C12Y203/01122 . . Trehalose O-mycolyltransferase (2.3.1.122) [N1204]
C12Y203/01123 . . Dolichol O-acyltransferase (2.3.1.123) [N1204]
C12Y203/01125 . . 1-Alkyl-2-acetylglycerol O-acyltransferase (2.3.1.125) [N1204]
C12Y203/01126 . . Isocitrate O-dihydroxycinnamoyltransferase (2.3.1.126) [N1204]
C12Y203/01127 . . Ornithine N-benzoyltransferase (2.3.1.127) [N1204]
C12Y203/01128 . . Ribosomal-protein-alanine N-acetyltransferase (2.3.1.128) [N1204]
C12Y203/01129 . . Acyl-[acyl-carrier-protein]-UDP-N-acetylglucosamine O-acyltransferase (2.3.1.129) [N1202]
C12Y203/01130 . . Galactarate O-hydroxycinnamoyltransferase (2.3.1.130) [N1204]
C12Y203/01131 . . Glucarate O-hydroxycinnamoyltransferase (2.3.1.131) [N1204]
C12Y203/01132 . . Glucarolactone O-hydroxycinnamoyltransferase (2.3.1.132) [N1204]
C12Y203/01133 . . Shikimate O-hydroxycinnamoyltransferase (2.3.1.133) [N1204]
C12Y203/01134 . . Galactolipid O-acyltransferase (2.3.1.134) [N1204]
C12Y203/01135 . . Phosphatidylcholine--retinol O-acyltransferase (2.3.1.135) [N1204]
C12Y203/01136 . . Polysialic-acid O-acetyltransferase (2.3.1.136) [N1204]
C12Y203/01137 . . Carnitine O-octanoyltransferase (2.3.1.137) [N1204]
C12Y203/01138 . . Putrescine N-hydroxycinnamoyltransferase (2.3.1.138) [N1204]
C12Y203/01139 . . Ecdysone O-acyltransferase (2.3.1.139) [N1204]
C12Y203/01140 . . Rosmarinate synthase (2.3.1.140) [N1204]
C12Y203/01141 . . Galactosylacylglycerol O-acyltransferase (2.3.1.141) [N1204]
C12Y203/01142 . . Glycoprotein O-fatty-acyltransferase (2.3.1.142) [N1204]
C12Y203/01143 . . Beta-glucogallin--tetrakisgalloylglucose O-galloyltransferase (2.3.1.143) [N1204]
C12Y203/01144 . . Anthranilate N-benzoyltransferase (2.3.1.144) [N1204]
C12Y203/01145 . . Piperidine N-piperoyltransferase (2.3.1.145) [N1204]

C12Y203/01146 . . Pinosylvin synthase (2.3.1.146) [N1204]
C12Y203/01147 . . Glycerophospholipid arachidonoyl-transferase (CoA-independent) (2.3.1.147) [N1204]
C12Y203/01148 . . Glycerophospholipid acyltransferase (CoA-dependent) (2.3.1.148) [N1204]
C12Y203/01149 . . Platelet-activating factor acetyltransferase (2.3.1.149) [N1204]
C12Y203/01150 . . Salutaridinol 7-O-acetyltransferase (2.3.1.150) [N1202]
C12Y203/01151 . . Benzophenone synthase (2.3.1.151) [N1204]
C12Y203/01152 . . Alcohol O-cinnamoyltransferase (2.3.1.152) [N1204]
C12Y203/01153 . . Anthocyanin 5-aromatic acyltransferase (2.3.1.153) [N1204]
C12Y203/01154 . . Propionyl-CoA C(2)-trimethyltridecanoyltransferase (2.3.1.154) [N1204]
C12Y203/01155 . . Acetyl-CoA C-myristoyltransferase (2.3.1.155) [N1204]
C12Y203/01156 . . Phloroisovalerophenone synthase (2.3.1.156) [N1204]
C12Y203/01157 . . Glucosamine-1-phosphate N-acetyltransferase (2.3.1.157) [N1204]
C12Y203/01158 . . Phospholipid:diacylglycerol acyltransferase (2.3.1.158) [N1204]
C12Y203/01159 . . Acridone synthase (2.3.1.159) [N1204]
C12Y203/01160 . . Vinorine synthase (2.3.1.160) [N1204]
C12Y203/01161 . . Lovastatin nonaketide synthase (2.3.1.161) [N1204]
C12Y203/01162 . . Taxadien-5-alpha-ol O-acetyltransferase (2.3.1.162) [N1204]
C12Y203/01163 . . 10-Hydroxytaxane O-acetyltransferase (2.3.1.163) [N1204]
C12Y203/01164 . . Isopenicillin-N N-acyltransferase (2.3.1.164) [N1202]
C12Y203/01165 . . 6-Methylsalicylic acid synthase (2.3.1.165) [N1204]
C12Y203/01166 . . 2-Alpha-hydroxytaxane 2-O-benzoyltransferase (2.3.1.166) [N1204]
C12Y203/01167 . . 10-Deacetylbaccatin III 10-O-acetyltransferase (2.3.1.167) [N1204]
C12Y203/01168 . . Dihydrolipoyllysine-residue (2-methylpropanoyl)transferase (2.3.1.168) [N1204]
C12Y203/01169 . . CO-Methylating acetyl-CoA synthase (2.3.1.169) [N1204]
C12Y203/01170 . . 6'-Deoxychalcone synthase (2.3.1.170) [N1204]
C12Y203/01171 . . Anthocyanin 6''-O-malonyltransferase (2.3.1.171) [N1204]
C12Y203/01172 . . Anthocyanin 5-O-glucoside 6'''-O-malonyltransferase (2.3.1.172) [N1204]
C12Y203/01173 . . Flavonol-3-O-triglucoside O-coumaroyltransferase (2.3.1.173) [N1204]
C12Y203/01174 . . 3-Oxoadipyl-CoA thiolase (2.3.1.174) [N1204]
C12Y203/01175 . . Deacetylcephalosporin-C acetyltransferase (2.3.1.175) [N1204]
C12Y203/01176 . . Propanoyl-CoA C-acyltransferase (2.3.1.176) [N1204]
C12Y203/01177 . . Biphenyl synthase (2.3.1.177) [N1204]
C12Y203/01178 . . Diaminobutyrate acetyltransferase (2.3.1.178) [N1204]
C12Y203/01179 . . Beta-ketoacyl-acyl-carrier-protein synthase II (2.3.1.179) [N1204]
C12Y203/01180 . . Beta-ketoacyl-acyl-carrier-protein synthase III (2.3.1.180) [N1202]
C12Y203/01181 . . Lipoyl(octanoyl) transferase (2.3.1.181) [N1204]
C12Y203/01182 . . (R)-Citramalate synthase (2.3.1.182) [N1202]
C12Y203/01183 . . Phosphinothricin acetyltransferase (2.3.1.183) [N1204]
C12Y203/01184 . . Acyl-homoserine-lactone synthase (2.3.1.184) [N1204]
C12Y203/01185 . . Tropine acyltransferase (2.3.1.185) [N1202]
C12Y203/01186 . . Pseudotropine acyltransferase (2.3.1.186) [N1204]

C12Y203/01187 . . Acetyl-S-ACP:malonate ACP transferase (2.3.1.187) [N1204]
C12Y203/01188 . . Omega-hydroxypalmitate O-feruloyl transferase (2.3.1.188) [N1204]
C12Y203/01189 . . Mycothiol synthase (2.3.1.189) [N1204]
C12Y203/01190 . . Acetoin dehydrogenase (2.3.1.190) [N1204]
C12Y203/01191 . . UDP-3-O-(3-hydroxymyristoyl)glucosamine N-acyltransferase (2.3.1.191) [N1204]
C12Y203/01192 . . Glycine N-phenylacetyltransferase (2.3.1.192) [N1204]
C12Y203/01193 . . tRNA(Met) cytidine acetyltransferase (2.3.1.193) [N1204]
C12Y203/01194 . . Acetoacetyl-CoA synthase (2.3.1.194) [N1204]
C12Y203/01195 . . (Z)-3-Hexen-1-ol acetyltransferase (2.3.1.195) [N1204]
C12Y203/01196 . . Benzyl alcohol O-benzoyltransferase (2.3.1.196) [N1204]

C12Y203/02 . Aminoacyltransferases (2.3.2) [N1202]
C12Y203/02001 . . D-Glutamyltransferase (2.3.2.1) [N1204]
C12Y203/02002 . . Gamma-glutamyltransferase (2.3.2.2) [N1202]
C12Y203/02003 . . Lysyltransferase (2.3.2.3) [N1204]
C12Y203/02004 . . Gamma-glutamylcyclotransferase (2.3.2.4) [N1204]
C12Y203/02005 . . Glutaminyl-peptide cyclotransferase (2.3.2.5) [N1202]
C12Y203/02006 . . Leucyltransferase (2.3.2.6) [N1204]
C12Y203/02007 . . Aspartyltransferase (2.3.2.7) [N1204]
C12Y203/02008 . . Arginyltransferase (2.3.2.8) [N1204]
C12Y203/02009 . . Agaritine gamma-glutamyltransferase (2.3.2.9) [N1204]
C12Y203/02010 . . UDP-N-acetylmuramoylpentapeptide-lysine N6-alanyltransferase (2.3.2.10) [N1204]
C12Y203/02011 . . Alanylphosphatidylglycerol synthase (2.3.2.11) [N1204]
C12Y203/02012 . . Peptidyltransferase (2.3.2.12) [N1202]
C12Y203/02013 . . Protein-glutamine gamma-glutamyltransferase (2.3.2.13), i.e. transglutaminase or factor XIII [N1202]
C12Y203/02014 . . D-Alanine gamma-glutamyltransferase (2.3.2.14) [N1204]
C12Y203/02015 . . Glutathione gamma-glutamylcysteinyltransferase (2.3.2.15), i.e. phytochelatin synthase [N1202]
C12Y203/02016 . . Lipid II:glycine glycyltransferase (2.3.2.16) [N1204]
C12Y203/02017 . . N-Acetylmuramoyl-L-alanyl-D-glutamyl-L-lysyl-(N6-glycyl)-D-alanyl-D-alanine-diphosphou (2.3.2.17) [N1204]
C12Y203/02018 . . N-Acetylmuramoyl-L-alanyl-D-glutamyl-L-lysyl-(N6-triglycine)-D-alanyl-D-alanine-diphosph (2.3.2.18) [N1204]

C12Y203/03 . Acyl groups converted into alkyl on transfer (2.3.3) [N1202]
C12Y203/03001 . . Citrate (Si)-synthase (2.3.3.1) [N1202]
C12Y203/03002 . . Decylcitrate synthase (2.3.3.2) [N1204]
C12Y203/03003 . . Citrate (Re)-synthase (2.3.3.3) [N1204]
C12Y203/03004 . . Decylhomocitrate synthase (2.3.3.4) [N1204]
C12Y203/03005 . . 2-Methylcitrate synthase (2.3.3.5) [N1204]
C12Y203/03006 . . 2-Ethylmalate synthase (2.3.3.6) [N1204]
C12Y203/03007 . . 3-Ethylmalate synthase (2.3.3.7) [N1204]

C12Y203/03008 . . ATP citrate synthase (2.3.3.8) [N1202]
C12Y203/03009 . . Malate synthase (2.3.3.9) [N1202]
C12Y203/03010 . . Hydroxymethylglutaryl-CoA synthase (2.3.3.10) [N1202]
C12Y203/03011 . . 2-Hydroxyglutarate synthase (2.3.3.11) [N1204]
C12Y203/03012 . . 3-Propylmalate synthase (2.3.3.12) [N1204]
C12Y203/03013 . . 2-Isopropylmalate synthase (2.3.3.13) [N1204]
C12Y203/03014 . . Homocitrate synthase (2.3.3.14) [N1202]
C12Y203/03015 . . Sulfoacetaldehyde acetyltransferase (2.3.3.15) [N1204]

C12Y204/00 **Glycosyltransferases (2.4)** [N1202]

C12Y204/01 . Hexosyltransferases (2.4.1) [N1202]
C12Y204/01001 . . Phosphorylase (2.4.1.1) [N1202]
C12Y204/01002 . . Dextrin dextranase (2.4.1.2) [N1204]
C12Y204/01004 . . Amylosucrase (2.4.1.4) [N1202]
C12Y204/01005 . . Dextransucrase (2.4.1.5) [N1202]
C12Y204/01007 . . Sucrose phosphorylase (2.4.1.7) [N1204]
C12Y204/01008 . . Maltose phosphorylase (2.4.1.8) [N1204]
C12Y204/01009 . . Inulosucrase (2.4.1.9) [N1202]
C12Y204/01010 . . Levansucrase (2.4.1.10) [N1202]
C12Y204/01011 . . Glycogen(starch) synthase (2.4.1.11) [N1202]
C12Y204/01012 . . Cellulose synthase (UDP-forming) (2.4.1.12) [N1202]
C12Y204/01013 . . Sucrose synthase (2.4.1.13) [N1202]
C12Y204/01014 . . Sucrose-phosphate synthase (2.4.1.14) [N1202]
C12Y204/01015 . . Alpha,alpha-trehalose-phosphate synthase (UDP-forming) (2.4.1.15) [N1202]
C12Y204/01016 . . Chitin synthase (2.4.1.16) [N1202]
C12Y204/01017 . . Glucuronosyltransferase (2.4.1.17) [N1202]
C12Y204/01018 . . 1,4-Alpha-glucan branching enzyme (2.4.1.18), i.e. glucan branching enzyme [N1202]
C12Y204/01019 . . Cyclomaltodextrin glucanotransferase (2.4.1.19) [N1202]
C12Y204/01020 . . Cellobiose phosphorylase (2.4.1.20) [N1202]
C12Y204/01021 . . Starch synthase (2.4.1.21) [N1202]
C12Y204/01022 . . Lactose synthase (2.4.1.22) [N1204]
C12Y204/01023 . . Sphingosine beta-galactosyltransferase (2.4.1.23) [N1204]
C12Y204/01024 . . 1,4-Alpha-glucan 6-alpha-glucosyltransferase (2.4.1.24) [N1202]
C12Y204/01025 . . 4-Alpha-glucanotransferase (2.4.1.25) [N1202]
C12Y204/01026 . . DNA alpha-glucosyltransferase (2.4.1.26) [N1204]
C12Y204/01027 . . DNA beta-glucosyltransferase (2.4.1.27) [N1204]
C12Y204/01028 . . Glucosyl-DNA beta-glucosyltransferase (2.4.1.28) [N1204]
C12Y204/01029 . . Cellulose synthase (GDP-forming) (2.4.1.29) [N1202]
C12Y204/01030 . . 1,3-Beta-oligoglucan phosphorylase (2.4.1.30) [N1204]
C12Y204/01031 . . Laminaribiose phosphorylase (2.4.1.31) [N1202]

C12Y204/01032 . . Glucomannan 4-beta-mannosyltransferase (2.4.1.32) [N1204]
C12Y204/01033 . . Alginate synthase (2.4.1.33) [N1204]
C12Y204/01034 . . 1,3-Beta-glucan synthase (2.4.1.34) [N1202]
C12Y204/01035 . . Phenol beta-glucosyltransferase (2.4.1.35) [N1204]
C12Y204/01036 . . Alpha,alpha-trehalose-phosphate synthase (GDP-forming) (2.4.1.36) [N1204]
C12Y204/01037 . . Fucosylgalactoside 3-alpha-galactosyltransferase (2.4.1.37) [N1204]
C12Y204/01038 . . Beta-N-acetylglucosaminylglycopeptide beta-1,4-galactosyltransferase (2.4.1.38) [N1202]
C12Y204/01039 . . Steroid N-acetylglucosaminyltransferase (2.4.1.39) [N1204]
C12Y204/01040 . . Glycoprotein-fucosylgalactoside alpha-N-acetylgalactosaminyltransferase (2.4.1.40) [N1204]
C12Y204/01041 . . Polypeptide N-acetylgalactosaminyltransferase (2.4.1.41) [N1202]
C12Y204/01043 . . Polygalacturonate 4-alpha-galacturonosyltransferase (2.4.1.43) [N1204]
C12Y204/01044 . . Lipopolysaccharide 3-alpha-galactosyltransferase (2.4.1.44) [N1204]
C12Y204/01045 . . 2-Hydroxyacylsphingosine 1-beta-galactosyltransferase (2.4.1.45) [N1202]
C12Y204/01046 . . Monogalactosyldiacylglycerol synthase (2.4.1.46) [N1204]
C12Y204/01047 . . N-Acylsphingosine galactosyltransferase (2.4.1.47) [N1204]
C12Y204/01048 . . Heteroglycan alpha-mannosyltransferase (2.4.1.48) [N1204]
C12Y204/01049 . . Cellodextrin phosphorylase (2.4.1.49) [N1202]
C12Y204/01050 . . Procollagen galactosyltransferase (2.4.1.50) [N1204]
C12Y204/01051 . . UDP-N-acetylglucosamine-glycoprotein N-acetylglucosaminyltransferase (2.4.1.51) (C12Y204/01101, C12Y204/01143-C12Y204/01145 take precedence) [N1204]
C12Y204/01052 . . Poly(glycerol-phosphate) alpha-glucosyltransferase (2.4.1.52) [N1204]
C12Y204/01053 . . Poly(ribitol-phosphate) beta-glucosyltransferase (2.4.1.53) [N1204]
C12Y204/01054 . . Undecaprenyl-phosphate mannosyltransferase (2.4.1.54) [N1204]
C12Y204/01056 . . Lipopolysaccharide N-acetylglucosaminyltransferase (2.4.1.56) [N1204]
C12Y204/01057 . . Phosphatidylinositol alpha-mannosyltransferase (2.4.1.57) [N1204]
C12Y204/01058 . . Lipopolysaccharide glucosyltransferase I (2.4.1.58) [N1204]
C12Y204/01060 . . Abequosyltransferase (2.4.1.60) [N1204]
C12Y204/01062 . . Ganglioside galactosyltransferase (2.4.1.62) [N1204]
C12Y204/01063 . . Linamarin synthase (2.4.1.63) [N1204]
C12Y204/01064 . . Alpha,alpha-trehalose phosphorylase (2.4.1.64) [N1202]
C12Y204/01065 . . 3-Galactosyl-N-acetylglucosaminide 4-alpha-L-fucosyltransferase (2.4.1.65), i.e. alpha-1-3 fucosyltransferase [N1202]
C12Y204/01066 . . Procollagen glucosyltransferase (2.4.1.66) [N1204]
C12Y204/01067 . . Galactinol--raffinose galactosyltransferase (2.4.1.67) [N1204]
C12Y204/01068 . . Glycoprotein 6-alpha-L-fucosyltransferase (2.4.1.68), i.e. FUT8 [N1202]
C12Y204/01069 . . Galactoside 2-alpha-L-fucosyltransferase (2.4.1.69) [N1202]
C12Y204/01070 . . Poly(ribitol-phosphate) N-acetylglucosaminyltransferase (2.4.1.70) [N1204]
C12Y204/01071 . . Arylamine glucosyltransferase (2.4.1.71) [N1204]
C12Y204/01073 . . Lipopolysaccharide glucosyltransferase II (2.4.1.73) [N1204]
C12Y204/01074 . . Glycosaminoglycan galactosyltransferase (2.4.1.74) [N1202]
C12Y204/01078 . . Phosphopolyprenol glucosyltransferase (2.4.1.78) [N1204]

C12Y204/01079 . . Globotriaosylceramide 3-beta-N-acetylgalactosaminyltransferase (2.4.1.79) [N1204]
C12Y204/01080 . . Ceramide glucosyltransferase (2.4.1.80) [N1202]
C12Y204/01081 . . Flavone 7-O-beta-glucosyltransferase (2.4.1.81) [N1204]
C12Y204/01082 . . Galactinol--sucrose galactosyltransferase (2.4.1.82) [N1204]
C12Y204/01083 . . Dolichyl-phosphate beta-D-mannosyltransferase (2.4.1.83) [N1204]
C12Y204/01085 . . Cyanohydrin beta-glucosyltransferase (2.4.1.85) [N1204]
C12Y204/01086 . . Glucosaminylgalactosylglucosylceramide beta-galactosyltransferase (2.4.1.86) [N1204]
C12Y204/01087 . . N-Acetyllactosaminide 3-alpha-galactosyltransferase (2.4.1.87), i.e. alpha-1,3-galactosyltransferase [N1202]
C12Y204/01088 . . Globoside alpha-N-acetylgalactosaminyltransferase (2.4.1.88) [N1202]
C12Y204/01090 . . N-Acetyllactosamine synthase (2.4.1.90) [N1204]
C12Y204/01091 . . Flavonol 3-O-glucosyltransferase (2.4.1.91) [N1204]
C12Y204/01092 . . (N-acetylneuraminyl)-galactosylglucosylceramide N-acetylgalactosaminyltransferase (2.4.1.92) [N1204]
C12Y204/01094 . . Protein N-acetylglucosaminyltransferase (2.4.1.94) [N1204]
C12Y204/01095 . . Bilirubin-glucuronoside glucuronosyltransferase (2.4.1.95) [N1204]
C12Y204/01096 . . sn-Glycerol-3-phosphate 1-galactosyltransferase (2.4.1.96) [N1204]
C12Y204/01097 . . 1,3-Beta-D-glucan phosphorylase (2.4.1.97) [N1204]
C12Y204/01099 . . Sucrose:sucrose fructosyltransferase (2.4.1.99) [N1202]
C12Y204/01100 . . 2,1-Fructan:2,1-fructan 1-fructosyltransferase (2.4.1.100) [N1204]
C12Y204/01101 . . Alpha-1,3-mannosyl-glycoprotein 2-beta-N-acetylglucosaminyltransferase (2.4.1.101) [N1202]
C12Y204/01102 . . Beta-1,3-galactosyl-O-glycosyl-glycoprotein beta-1,6-N-acetylglucosaminyltransferase (2.4.1.102) [N1204]
C12Y204/01103 . . Alizarin 2-beta-glucosyltransferase (2.4.1.103) [N1204]
C12Y204/01104 . . o-Dihydroxycoumarin 7-O-glucosyltransferase (2.4.1.104) [N1204]
C12Y204/01105 . . Vitexin beta-glucosyltransferase (2.4.1.105) [N1204]
C12Y204/01106 . . Isovitexin beta-glucosyltransferase (2.4.1.106) [N1204]
C12Y204/01109 . . Dolichyl-phosphate-mannose-protein mannosyltransferase (2.4.1.109) [N1204]
C12Y204/01110 . . tRNA-queuosine beta-mannosyltransferase (2.4.1.110) [N1204]
C12Y204/01111 . . Coniferyl-alcohol glucosyltransferase (2.4.1.111) [N1204]
C12Y204/01113 . . Alpha-1,4-glucan-protein synthase (ADP-forming) (2.4.1.113) [N1204]
C12Y204/01114 . . 2-Coumarate O-beta-glucosyltransferase (2.4.1.114) [N1204]
C12Y204/01115 . . Anthocyanidin 3-O-glucosyltransferase (2.4.1.115) [N1204]
C12Y204/01116 . . Cyanidin 3-O-rutinoside 5-O-glucosyltransferase (2.4.1.116) [N1204]
C12Y204/01117 . . Dolichyl-phosphate beta-glucosyltransferase (2.4.1.117) [N1204]
C12Y204/01118 . . Cytokinin 7-beta-glucosyltransferase (2.4.1.118) [N1204]
C12Y204/01119 . . Dolichyl-diphosphooligosaccharide--protein glycotransferase (2.4.1.119) [N1204]
C12Y204/01120 . . Sinapate 1-glucosyltransferase (2.4.1.120) [N1204]
C12Y204/01121 . . Indole-3-acetate beta-glucosyltransferase (2.4.1.121) [N1204]
C12Y204/01122 . . Glycoprotein-N-acetylgalactosamine 3-beta-galactosyltransferase (2.4.1.122) [N1204]

C12Y204/01123 . . Inositol 3-alpha-galactosyltransferase (2.4.1.123) i.e. galactinol-synthase [N1202]
C12Y204/01125 . . Sucrose--1,6-alpha-glucan 3(6)-alpha-glucosyltransferase (2.4.1.125) [N1204]
C12Y204/01126 . . Hydroxycinnamate 4-beta-glucosyltransferase (2.4.1.126) [N1204]
C12Y204/01127 . . Monoterpenol beta-glucosyltransferase (2.4.1.127) [N1204]
C12Y204/01128 . . Scopoletin glucosyltransferase (2.4.1.128) [N1204]
C12Y204/01129 . . Peptidoglycan glycosyltransferase (2.4.1.129) [N1204]
C12Y204/01130 . . Dolichyl-phosphate-mannose-glycolipid alpha-mannosyltransferase (2.4.1.130) (C12Y204/01258-C12Y204/01261 take precedence) [N1204]
C12Y204/01131 . . GDP-Man:Man(3)GlcNAc2-PP-Dol alpha-1,2-mannosyltransferase (2.4.1.131) [N1204]
C12Y204/01132 . . GDP-Man:Man(1)GlcNAc2-PP-Dol alpha-1,3-mannosyltransferase (2.4.1.132) [N1204]
C12Y204/01133 . . Xylosylprotein 4-beta-galactosyltransferase (2.4.1.133) [N1202]
C12Y204/01134 . . Galactosylxylosylprotein 3-beta-galactosyltransferase (2.4.1.134) [N1204]
C12Y204/01135 . . Galactosylgalactosylxylosylprotein 3-beta-glucuronosyltransferase (2.4.1.135) [N1204]
C12Y204/01136 . . Gallate 1-beta-glucosyltransferase (2.4.1.136) [N1204]
C12Y204/01137 . . sn-Glycerol-3-phosphate 2-alpha-galactosyltransferase (2.4.1.137) [N1204]
C12Y204/01138 . . Mannotetraose 2-alpha-N-acetylglucosaminyltransferase (2.4.1.138) [N1204]
C12Y204/01139 . . Maltose synthase (2.4.1.139) [N1204]
C12Y204/01140 . . Alternansucrase (2.4.1.140) [N1202]
C12Y204/01141 . . N-Acetylglucosaminyldiphosphodolichol N-acetylglucosaminyltransferase (2.4.1.141) [N1204]
C12Y204/01142 . . Chitobiosyldiphosphodolichol beta-mannosyltransferase (2.4.1.142) [N1204]
C12Y204/01143 . . Alpha-1,6-mannosyl-glycoprotein 2-beta-N-acetylglucosaminyltransferase (2.4.1.143) [N1202]
C12Y204/01144 . . Beta-1,4-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase (2.4.1.144) [N1202]
C12Y204/01145 . . Alpha-1,3-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase (2.4.1.145) [N1204]
C12Y204/01146 . . Beta-1,3-galactosyl-O-glycosyl-glycoprotein beta-1,3-N-acetylglucosaminyltransferase (2.4.1.146) [N1204]
C12Y204/01147 . . Acetylgalactosaminyl-O-glycosyl-glycoprotein beta-1,3-N-acetylglucosaminyltransferase (2.4.1.147) [N1204]
C12Y204/01148 . . Acetylgalactosaminyl-O-glycosyl-glycoprotein beta-1,6-N-acetylglucosaminyltransferase (2.4.1.148) [N1204]
C12Y204/01149 . . N-Acetyllactosaminide beta-1,3-N-acetylglucosaminyltransferase (2.4.1.149) [N1204]
C12Y204/01150 . . N-Acetyllactosaminide beta-1,6-N-acetylglucosaminyl-transferase (2.4.1.150) [N1202]
C12Y204/01152 . . 4-Galactosyl-N-acetylglucosaminide 3-alpha-L-fucosyltransferase (2.4.1.152) [N1204]
C12Y204/01153 . . Dolichyl-phosphate alpha-N-acetylglucosaminyltransferase (2.4.1.153) [N1204]
C12Y204/01155 . . Alpha-1,6-mannosyl-glycoprotein 6-beta-N-acetylglucosaminyltransferase (2.4.1.155) [N1204]
C12Y204/01156 . . Indolylacetyl-myo-inositol galactosyltransferase (2.4.1.156) [N1204]
C12Y204/01157 . . 1,2-Diacylglycerol 3-glucosyltransferase (2.4.1.157) [N1204]

C12Y204/01158 . . 13-Hydroxydocosanoate 13-beta-glucosyltransferase (2.4.1.158) [N1204]
C12Y204/01159 . . Flavonol-3-O-glucoside L-rhamnosyltransferase (2.4.1.159) [N1204]
C12Y204/01160 . . Pyridoxine 5'-O-beta-D-glucosyltransferase (2.4.1.160) [N1204]
C12Y204/01161 . . Oligosaccharide 4-alpha-D-glucosyltransferase (2.4.1.161) [N1204]
C12Y204/01162 . . Aldose beta-D-fructosyltransferase (2.4.1.162) [N1204]
C12Y204/01163 . . Beta-galactosyl-N-acetylglucosaminylgalactosylglucosyl-ceramide beta-1,3-acetylglucosaminyltransferase (2.4.1.163) [N1204]
C12Y204/01164 . . Galactosyl-N-acetylglucosaminylgalactosylglucosyl-ceramide beta-1,6-N-acetylglucosaminyltransferase (2.4.1.164) [N1204]
C12Y204/01165 . . N-Acetylneuraminylgalactosylglucosylceramide beta-1,4-N-acetylgalactosaminyltransferase (2.4.1.165) [N1204]
C12Y204/01166 . . Raffinose--raffinose alpha-galactosyltransferase (2.4.1.166) [N1204]
C12Y204/01167 . . Sucrose 6F-alpha-galactosyltransferase (2.4.1.167) [N1204]
C12Y204/01168 . . Xyloglucan 4-glucosyltransferase (2.4.1.168) [N1204]
C12Y204/01170 . . Isoflavone 7-O-glucosyltransferase (2.4.1.170) [N1204]
C12Y204/01171 . . Methyl-ONN-azoxymethanol beta-D-glucosyltransferase (2.4.1.171) [N1204]
C12Y204/01172 . . Salicyl-alcohol beta-D-glucosyltransferase (2.4.1.172) [N1204]
C12Y204/01173 . . Sterol 3-beta-glucosyltransferase (2.4.1.173) [N1204]
C12Y204/01174 . . Glucuronylgalactosylproteoglycan 4-beta-N-acetylgalactosaminyltransferase (2.4.1.174), i.e. chondroitin sulfate N-acetylgalactosaminyltransferase-1 [N1202]
C12Y204/01175 . . Glucuronosyl-N-acetylgalactosaminyl-proteoglycan 4-beta-N-acetylgalactosaminyltransferase II (2.4.1.175) [N1202]
C12Y204/01176 . . Gibberellin beta-D-glucosyltransferase (2.4.1.176) [N1204]
C12Y204/01177 . . Cinnamate beta-D-glucosyltransferase (2.4.1.177) [N1204]
C12Y204/01178 . . Hydroxymandelonitrile glucosyltransferase (2.4.1.178) [N1204]
C12Y204/01179 . . Lactosylceramide beta-1,3-galactosyltransferase (2.4.1.179) [N1204]
C12Y204/01180 . . Lipopolysaccharide N-acetylmannosaminouronosyltransferase (2.4.1.180) [N1204]
C12Y204/01181 . . Hydroxyanthraquinone glucosyltransferase (2.4.1.181) [N1204]
C12Y204/01182 . . Lipid-A-disaccharide synthase (2.4.1.182) [N1204]
C12Y204/01183 . . Alpha-1,3-glucan synthase (2.4.1.183) [N1204]
C12Y204/01184 . . Galactolipid galactosyltransferase (2.4.1.184) [N1204]
C12Y204/01185 . . Flavanone 7-O-beta-glucosyltransferase (2.4.1.185) [N1204]
C12Y204/01186 . . Glycogenin glucosyltransferase (2.4.1.186) [N1202]
C12Y204/01187 . . N-Acetylglucosaminyldiphosphoundecaprenol N-acetyl-beta-D-mannosaminyltransferase (2.4.1.187) [N1204]
C12Y204/01188 . . N-Acetylglucosaminyldiphosphoundecaprenol glucosyltransferase (2.4.1.188) [N1204]
C12Y204/01189 . . Luteolin 7-O-glucuronosyltransferase (2.4.1.189) [N1204]
C12Y204/01190 . . Luteolin-7-O-glucuronide 2''-O-glucuronosyltransferase (2.4.1.190) [N1204]
C12Y204/01191 . . Luteolin-7-O-diglucuronide 4'-O-glucuronosyltransferase (2.4.1.191) [N1204]
C12Y204/01192 . . Nuatigenin 3-beta-glucosyltransferase (2.4.1.192) [N1204]
C12Y204/01193 . . Sarsapogenin 3-beta-glucosyltransferase (2.4.1.193) [N1204]
C12Y204/01194 . . 4-Hydroxybenzoate 4-O-beta-D-glucosyltransferase (2.4.1.194) [N1204]
C12Y204/01195 . . N-Hydroxythioamide S-beta-glucosyltransferase (2.4.1.195) [N1204]

C12Y204/01196 . . Nicotinate glucosyltransferase (2.4.1.196) [N1204]
C12Y204/01197 . . High-mannose-oligosaccharide beta-1,4-N-acetylglucosaminyltransferase (2.4.1.197) [N1204]
C12Y204/01198 . . Phosphatidylinositol N-acetylglucosaminyltransferase (2.4.1.198) [N1204]
C12Y204/01199 . . Beta-mannosylphosphodecaprenol--mannooligosaccharide 6-mannosyltransferase (2.4.1.199) [N1204]
C12Y204/01201 . . Alpha-1,6-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase (2.4.1.201) [N1204]
C12Y204/01202 . . 2,4-Dihydroxy-7-methoxy-2H-1,4-benzoxazin-3(4H)-one 2-D-glucosyltransferase (2.4.1.202) [N1204]
C12Y204/01203 . . Trans-zeatin O-beta-D-glucosyltransferase (2.4.1.203) [N1204]
C12Y204/01205 . . Galactogen 6-beta-galactosyltransferase (2.4.1.205) [N1204]
C12Y204/01206 . . Lactosylceramide 1,3-N-acetyl-beta-D-glucosaminyltransferase (2.4.1.206) [N1204]
C12Y204/01207 . . Xyloglucan:xyloglucosyl transferase (2.4.1.207) [N1204]
C12Y204/01208 . . Diglucosyl diacylglycerol synthase (2.4.1.208) [N1204]
C12Y204/01209 . . Cis-p-coumarate glucosyltransferase (2.4.1.209) [N1204]
C12Y204/01210 . . Limonoid glucosyltransferase (2.4.1.210) [N1204]
C12Y204/01211 . . 1,3-Beta-galactosyl-N-acetylhexosamine phosphorylase (2.4.1.211) [N1204]
C12Y204/01212 . . Hyaluronan synthase (2.4.1.212) [N1202]
C12Y204/01213 . . Glucosylglycerol-phosphate synthase (2.4.1.213) [N1204]
C12Y204/01214 . . Glycoprotein 3-alpha-L-fucosyltransferase (2.4.1.214) [N1204]
C12Y204/01215 . . Cis-zeatin O-beta-D-glucosyltransferase (2.4.1.215) [N1204]
C12Y204/01216 . . Trehalose 6-phosphate phosphorylase (2.4.1.216) [N1204]
C12Y204/01217 . . Mannosyl-3-phosphoglycerate synthase (2.4.1.217) [N1204]
C12Y204/01218 . . Hydroquinone glucosyltransferase (2.4.1.218) [N1204]
C12Y204/01219 . . Vomilenine glucosyltransferase (2.4.1.219) [N1204]
C12Y204/01220 . . Indoxyl-UDPG glucosyltransferase (2.4.1.220) [N1204]
C12Y204/01221 . . Peptide-O-fucosyltransferase (2.4.1.221) [N1204]
C12Y204/01222 . . O-Fucosylpeptide 3-beta-N-acetylglucosaminyltransferase (2.4.1.222) [N1204]
C12Y204/01223 . . Glucuronyl-galactosyl-proteoglycan 4-alpha-N-acetylglucosaminyltransferase (2.4.1.223) [N1204]
C12Y204/01224 . . Glucuronosyl-N-acetylglucosaminyl-proteoglycan 4-alpha-N-acetylglucosaminyltransferase (2.4.1.224) [N1204]
C12Y204/01225 . . N-Acetylglucosaminyl-proteoglycan 4-beta-glucuronosyltransferase (2.4.1.225) [N1204]
C12Y204/01226 . . N-Acetylgalactosaminyl-proteoglycan 3-beta-glucuronosyltransferase (2.4.1.226), i.e. chondroitin sulfate glucuronyltransferase [N1202]
C12Y204/01227 . . Undecaprenyldiphospho-muramoylpentapeptide beta-N-acetylglucosaminyltransferase (2.4.1.227) [N1204]
C12Y204/01228 . . Lactosylceramide 4-alpha-galactosyltransferase (2.4.1.228) [N1204]
C12Y204/01229 . . [Skp1-protein-hydroxyproline N-acetylglucosaminyltransferase (2.4.1.229) [N1204]
C12Y204/01230 . . Kojibiose phosphorylase (2.4.1.230) [N1204]
C12Y204/01231 . . Alpha,alpha-trehalose phosphorylase (configuration-retaining) (2.4.1.231) [N1204]
C12Y204/01232 . . Initiation-specific alpha-1,6-mannosyltransferase (2.4.1.232) [N1204]
C12Y204/01234 . . Kaempferol 3-O-galactosyltransferase (2.4.1.234) [N1204]

C12Y204/01236 . . Flavanone 7-O-glucoside 2''-O-beta-L-rhamnosyltransferase (2.4.1.236) [N1204]
C12Y204/01237 . . Flavonol 7-O-beta-glucosyltransferase (2.4.1.237) [N1204]
C12Y204/01238 . . Anthocyanin 3'-O-beta-glucosyltransferase (2.4.1.238) [N1204]
C12Y204/01239 . . Flavonol-3-O-glucoside glucosyltransferase (2.4.1.239) [N1204]
C12Y204/01240 . . Flavonol-3-O-glycoside glucosyltransferase (2.4.1.240) [N1204]
C12Y204/01241 . . Digalactosyldiacylglycerol synthase (2.4.1.241) [N1204]
C12Y204/01242 . . NDP-glucose--starch glucosyltransferase (2.4.1.242) [N1204]
C12Y204/01243 . . 6G-Fructosyltransferase (2.4.1.243) [N1204]
C12Y204/01244 . . N-Acetyl-beta-glucosaminyl-glycoprotein 4-beta-N-acetylgalactosaminyltransferase (2.4.1.244) [N1204]
C12Y204/01245 . . Alpha,alpha-trehalose synthase (2.4.1.245) [N1204]
C12Y204/01246 . . Mannosylfructose-phosphate synthase (2.4.1.246) [N1204]
C12Y204/01247 . . Beta-D-galactosyl-(1->4)-L-rhamnose phosphorylase (2.4.1.247) [N1204]
C12Y204/01248 . . Cycloisomaltooligosaccharide glucanotransferase (2.4.1.248) [N1204]
C12Y204/01249 . . Delphinidin 3',5'-O-glucosyltransferase (2.4.1.249) [N1204]
C12Y204/01250 . . D-Inositol-3-phosphate glycosyltransferase (2.4.1.250) [N1204]
C12Y204/01251 . . GlcA-beta-(1->2)-D-Man-alpha-(1->3)-D-Glc-beta-(1->4)-D-Glc-alpha-1-diphosphoundeca 4-beta-mannosyltransferase (2.4.1.251) [N1204]
C12Y204/01252 . . GDP-mannose:cellobiosyl-diphosphopolyprenol alpha-mannosyltransferase (2.4.1.252) [N1204]
C12Y204/01253 . . Baicalein 7-O-glucuronosyltransferase (2.4.1.253) [N1204]
C12Y204/01254 . . Cyanidin-3-O-glucoside 2-O-glucuronosyltransferase (2.4.1.254) [N1204]
C12Y204/01255 . . Protein O-GlcNAc transferase (2.4.1.255) [N1204]
C12Y204/01256 . . Dol-P-Glc:Glc2Man9GlcNAc2-PP-Dol alpha-1,2-glucosyltransferase (2.4.1.256) [N1204]
C12Y204/01257 . . GDP-Man:Man2GlcNAc2-PP-Dol alpha-1,6-mannosyltransferase (2.4.1.257) [N1204]
C12Y204/01258 . . Dol-P-Man:Man5GlcNAc2-PP-Dol alpha-1,3-mannosyltransferase (2.4.1.258) [N1204]
C12Y204/01259 . . Dol-P-Man:Man6GlcNAc2-PP-Dol alpha-1,2-mannosyltransferase (2.4.1.259) [N1204]
C12Y204/01260 . . Dol-P-Man:Man7GlcNAc2-PP-Dol alpha-1,6-mannosyltransferase (2.4.1.260) [N1204]
C12Y204/01261 . . Dol-P-Man:Man8GlcNAc2-PP-Dol alpha-1,2-mannosyltransferase (2.4.1.261) [N1204]
C12Y204/01262 . . Soyasapogenol glucuronosyltransferase (2.4.1.262) [N1204]
C12Y204/01263 . . Abscisate beta-glucosyltransferase (2.4.1.263) [N1204]
C12Y204/01264 . . D-Man-alpha-(1->3)-D-Glc-beta-(1->4)-D-Glc-alpha-1-diphosphoundecaprenol 2-beta-glucuronyltransferase (2.4.1.264) [N1204]
C12Y204/01265 . . Dol-P-Glc:Glc1Man9GlcNAc2-PP-Dol alpha-1->3-glucosyltransferase (2.4.1.265) [N1204]
C12Y204/01266 . . Glucosyl-3-phosphoglycerate synthase (2.4.1.266) [N1204]
C12Y204/01267 . . Dol-P-Glc:Man9GlcNAc2-PP-Dol alpha-1->3-glucosyltransferase (2.4.1.267) [N1204]
C12Y204/01268 . . Glucosylglycerate synthase (2.4.1.268) [N1204]
C12Y204/01269 . . Mannosylglycerate synthase (2.4.1.269) [N1204]

C12Y204/01270 . . Mannosylglucosyl-3-phosphoglycerate synthase (2.4.1.270) [N1204]
C12Y204/01271 . . Crocetin glucosyltransferase (2.4.1.271) [N1204]
C12Y204/01272 . . Soyasapogenol B glucuronide galactosyltransferase (2.4.1.272) [N1204]
C12Y204/01273 . . Soyasaponin III rhamnosyltransferase (2.4.1.273) [N1204]
C12Y204/01274 . . Glucosylceramide beta-1,4-galactosyltransferase (2.4.1.274) [N1204]
C12Y204/01275 . . Lactotriaosylceramide beta-1,4-galactosyltransferase (2.4.1.275) [N1204]
C12Y204/01276 . . Zeaxanthin glucosyltransferase (2.4.1.276) [N1204]
C12Y204/01277 . . Glycosyltransferase DesVII (2.4.1.277) [N1204]

C12Y204/02 . Pentosyltransferases (2.4.2) [N1202]
C12Y204/02001 . . Purine-nucleoside phosphorylase (2.4.2.1) [N1202]
C12Y204/02002 . . Pyrimidine-nucleoside phosphorylase (2.4.2.2) [N1204]
C12Y204/02003 . . Uridine phosphorylase (2.4.2.3) [N1202]
C12Y204/02004 . . Thymidine phosphorylase (2.4.2.4) [N1202]
C12Y204/02005 . . Nucleoside ribosyltransferase (2.4.2.5) [N1204]
C12Y204/02006 . . Nucleoside deoxyribosyltransferase (2.4.2.6) [N1204]
C12Y204/02007 . . Adenine phosphoribosyltransferase (2.4.2.7) [N1202]
C12Y204/02008 . . Hypoxanthine phosphoribosyltransferase (2.4.2.8) [N1202]
C12Y204/02009 . . Uracil phosphoribosyltransferase (2.4.2.9) [N1202]
C12Y204/02010 . . Orotate phosphoribosyltransferase (2.4.2.10) [N1202]
C12Y204/02011 . . Nicotinate phosphoribosyltransferase (2.4.2.11) [N1202]
C12Y204/02012 . . Nicotinamide phosphoribosyltransferase (2.4.2.12), i.e. visfatin [N1202]
C12Y204/02014 . . Amidophosphoribosyltransferase (2.4.2.14) [N1204]
C12Y204/02015 . . Guanosine phosphorylase (2.4.2.15) [N1204]
C12Y204/02016 . . Urate-ribonucleotide phosphorylase (2.4.2.16) [N1204]
C12Y204/02017 . . ATP phosphoribosyltransferase (2.4.2.17) [N1204]
C12Y204/02018 . . Anthranilate phosphoribosyltransferase (2.4.2.18) [N1202]
C12Y204/02019 . . Nicotinate-nucleotide diphosphorylase (carboxylating) (2.4.2.19) [N1204]
C12Y204/02020 . . Dioxotetrahydropyrimidine phosphoribosyltransferase (2.4.2.20) [N1204]
C12Y204/02021 . . Nicotinate-nucleotide--dimethylbenzimidazole phosphoribosyltransferase (2.4.2.21) [N1204]
C12Y204/02022 . . Xanthine phosphoribosyltransferase (2.4.2.22) [N1204]
C12Y204/02023 . . Deoxyuridine phosphorylase (2.4.2.23) [N1204]
C12Y204/02024 . . 1,4-Beta-D-xylan synthase (2.4.2.24) [N1204]
C12Y204/02025 . . Flavone apiosyltransferase (2.4.2.25) [N1204]
C12Y204/02026 . . Protein xylosyltransferase (2.4.2.26) [N1204]
C12Y204/02027 . . dTDP-dihydrostreptose--streptidine-6-phosphate dihydrostreptosyltransferase (2.4.2.27) [N1204]
C12Y204/02028 . . S-Methyl-5'-thioadenosine phosphorylase (2.4.2.28) [N1202]
C12Y204/02029 . . tRNA-guanine transglycosylase (2.4.2.29) [N1204]
C12Y204/02030 . . NAD+ ADP-ribosyltransferase (2.4.2.30), i.e. tankyrase or poly(ADP-ribose) polymerase [N1202]
C12Y204/02031 . . NAD+-protein-arginine ADP-ribosyltransferase (2.4.2.31) [N1202]

C12Y204/02032 . . Dolichyl-phosphate D-xylosyltransferase (2.4.2.32) [N1204]
C12Y204/02033 . . Dolichyl-xylosyl-phosphate--protein xylosyltransferase (2.4.2.33) [N1204]
C12Y204/02034 . . Indolylacetylinositol arabinosyltransferase (2.4.2.34) [N1204]
C12Y204/02035 . . Flavonol-3-O-glycoside xylosyltransferase (2.4.2.35) [N1204]
C12Y204/02036 . . NAD(+)--diphthamide ADP-ribosyltransferase (2.4.2.36) [N1204]
C12Y204/02037 . . NAD(+)--dinitrogen-reductase ADP-D-ribosyltransferase (2.4.2.37) [N1204]
C12Y204/02038 . . Glycoprotein 2-beta-D-xylosyltransferase (2.4.2.38) [N1204]
C12Y204/02039 . . Xyloglucan 6-xylosyltransferase (2.4.2.39) [N1204]
C12Y204/02040 . . Zeatin O-beta-D-xylosyltransferase (2.4.2.40) [N1204]
C12Y204/02041 . . Xylogalacturonan beta-1,3-xylosyltransferase (2.4.2.41) [N1204]
C12Y204/02042 . . UDP-D-xylose:beta-D-glucoside alpha-1,3-D-xylosyltransferase (2.4.2.42) [N1204]
C12Y204/02043 . . Lipid IVA 4-amino-4-deoxy-L-arabinosyltransferase (2.4.2.43) [N1204]
C12Y204/02044 . . S-Methyl-5'-thioinosine phosphorylase (2.4.2.44) [N1204]

C12Y204/99 . transferring other glycosyl groups (2.4.99) [N1202]
C12Y204/99001 . . Beta-galactoside alpha-2,6-sialyltransferase (2.4.99.1) [N1202]
C12Y204/99002 . . Monosialoganglioside sialyltransferase (2.4.99.2) [N1202]
C12Y204/99003 . . Alpha-N-acetylgalactosaminide alpha-2,6-sialyltransferase (2.4.99.3) [N1202]
C12Y204/99004 . . Beta-galactoside alpha-2,3-sialyltransferase (2.4.99.4) [N1202]
C12Y204/99005 . . Galactosyldiacylglycerol alpha-2,3-sialyltransferase (2.4.99.5) [N1202]
C12Y204/99006 . . N-Acetyllactosaminide alpha-2,3-sialyltransferase (2.4.99.6) [N1202]
C12Y204/99007 . . Alpha-N-acetylneuraminyl-2,3-beta-galactosyl-1,3-N-acetylgalactosaminide 6-alpha-sialyltransferase (2.4.99.7) [N1202]
C12Y204/99008 . . Alpha-N-acetylneuraminate alpha-2,8-sialyltransferase (2.4.99.8) [N1202]
C12Y204/99009 . . Lactosylceramide alpha-2,3-sialyltransferase (2.4.99.9) [N1202]
C12Y204/99010 . . Neolactotetraosylceramide alpha-2,3-sialyltransferase (2.4.99.10) [N1202]
C12Y204/99011 . . Lactosylceramide alpha-2,6-N-sialyltransferase (2.4.99.11) [N1202]
C12Y204/99012 . . Lipid IVA 3-deoxy-D-manno-octulosonic acid transferase (2.4.99.12) [N1204]
C12Y204/99013 . . (KDO)-lipid IVA 3-deoxy-D-manno-octulosonic acid transferase (2.4.99.13) [N1204]
C12Y204/99014 . . (KDO)2-lipid IVA (2-8) 3-deoxy-D-manno-octulosonic acid transferase (2.4.99.14) [N1204]
C12Y204/99015 . . (KDO)3-lipid IVA (2-4) 3-deoxy-D-manno-octulosonic acid transferase (2.4.99.15) [N1204]

C12Y205/00 Transferases transferring alkyl or aryl groups, other than methyl groups (2.5) [N1202]

C12Y205/01 . transferring alkyl or aryl groups, other than methyl groups (2.5.1) [N1202]
C12Y205/01001 . . Dimethylallyltranstransferase (2.5.1.1) [N1204]
C12Y205/01002 . . Thiamine pyridinylase (2.5.1.2) [N1202]
C12Y205/01003 . . Thiamine-phosphate diphosphorylase (2.5.1.3) [N1204]
C12Y205/01004 . . Adenosylmethionine cyclotransferase (2.5.1.4) [N1204]
C12Y205/01005 . . Galactose-6-sulfurylase (2.5.1.5) [N1204]
C12Y205/01006 . . Methionine adenosyltransferase (2.5.1.6), i.e. adenosylmethionine synthetase

N1202]

C12Y205/01007 . . UDP-N-acetylglucosamine 1-carboxyvinyltransferase (2.5.1.7) [N1202]

C12Y205/01009 . . Riboflavin synthase (2.5.1.9) [N1202]

C12Y205/01010 . . (2E,6E)-Farnesyl diphosphate synthase (2.5.1.10), i.e. geranyltranstransferase [N1202]

C12Y205/01011 . . Trans-octaprenyltranstransferase (2.5.1.11) (C12Y205/01084, C12Y205/01085 take precedence) [N1204]

C12Y205/01015 . . Dihydropteroate synthase (2.5.1.15) [N1204]

C12Y205/01016 . . Spermidine synthase (2.5.1.16) [N1204]

C12Y205/01017 . . Cob(I)yrinic acid a,c-diamide adenosyltransferase (2.5.1.17) [N1204]

C12Y205/01018 . . Glutathione transferase (2.5.1.18) [N1202]

C12Y205/01019 . . 3-Phosphoshikimate 1-carboxyvinyltransferase (2.5.1.19), i.e. 5-enolpyruvylshikimate-3-phosphate synthase [N1202]

C12Y205/01020 . . Rubber cis-polyprenylcistransferase (2.5.1.20) [N1204]

C12Y205/01021 . . Squalene synthase (2.5.1.21), i.e. farnesyl-disphosphate farnesyltransferase [N1202]

C12Y205/01022 . . Spermine synthase (2.5.1.22) [N1204]

C12Y205/01023 . . Sym-norspermidine synthase (2.5.1.23) [N1204]

C12Y205/01024 . . Discadenine synthase (2.5.1.24) [N1204]

C12Y205/01025 . . tRNA-uridine aminocarboxypropyltransferase (2.5.1.25) [N1204]

C12Y205/01026 . . Alkylglycerone-phosphate synthase (2.5.1.26) [N1204]

C12Y205/01027 . . Adenylate dimethylallyltransferase (2.5.1.27) [N1204]

C12Y205/01028 . . Dimethylallylcistransferase (2.5.1.28) [N1204]

C12Y205/01029 . . Geranylgeranyl diphosphate synthase (2.5.1.29) [N1202]

C12Y205/01030 . . Heptaprenyl diphosphate synthase (2.5.1.30) [N1204]

C12Y205/01031 . . Ditrans,polycis-undecaprenyl-diphosphate synthase [(2E,6E)-farnesyl-diphosphate specific] (2.5.1.31) [N1202]

C12Y205/01032 . . Phytoene synthase (2.5.1.32) [N1204]

C12Y205/01033 . . Trans-pentaprenyltranstransferase (2.5.1.33) (C12Y205/01082, C12Y205/01083 take precedence) [N1204]

C12Y205/01034 . . 4-Dimethylallyltryptophan synthase (2.5.1.34) [N1204]

C12Y205/01035 . . Aspulvinone dimethylallyltransferase (2.5.1.35) [N1204]

C12Y205/01036 . . Trihydroxypterocarpan dimethylallyltransferase (2.5.1.36) [N1204]

C12Y205/01038 . . Isonocardicin synthase (2.5.1.38) [N1204]

C12Y205/01039 . . 4-Hydroxybenzoate polyprenyltransferase (2.5.1.39) [N1204]

C12Y205/01041 . . Phosphoglycerol geranylgeranyltransferase (2.5.1.41) [N1204]

C12Y205/01042 . . Geranylgeranylglycerol-phosphate geranylgeranyltransferase (2.5.1.42) [N1202]

C12Y205/01043 . . Nicotianamine synthase (2.5.1.43) [N1202]

C12Y205/01044 . . Homospermidine synthase (2.5.1.44) [N1204]

C12Y205/01045 . . Homospermidine synthase (spermidine-specific) (2.5.1.45) [N1204]

C12Y205/01046 . . Deoxyhypusine synthase (2.5.1.46) [N1204]

C12Y205/01047 . . Cysteine synthase (2.5.1.47) [N1204]

C12Y205/01048 . . Cystathionine gamma-synthase (2.5.1.48) [N1204]

C12Y205/01049 . . O-acetylhomoserine aminocarboxypropyltransferase (2.5.1.49) [N1204]

C12Y205/01050 . . Zeatin 9-aminocarboxyethyltransferase (2.5.1.50) [N1204]
C12Y205/01051 . . Beta-pyrazolylalanine synthase (2.5.1.51) [N1204]
C12Y205/01052 . . L-Mimosine synthase (2.5.1.52) [N1204]
C12Y205/01053 . . Uracilylalanine synthase (2.5.1.53) [N1204]
C12Y205/01054 . . 3-Deoxy-7-phosphoheptulonate synthase (2.5.1.54) [N1204]
C12Y205/01055 . . 3-Deoxy-8-phosphooctulonate synthase (2.5.1.55) [N1202]
C12Y205/01056 . . N-acetylneuraminate synthase (2.5.1.56) [N1202]
C12Y205/01057 . . N-Acylneuraminate-9-phosphate synthase (2.5.1.57) [N1204]
C12Y205/01058 . . Protein farnesyltransferase (2.5.1.58) [N1204]
C12Y205/01059 . . Protein geranylgeranyltransferase type I (2.5.1.59) [N1204]
C12Y205/01060 . . Protein geranylgeranyltransferase type II (2.5.1.60) [N1202]
C12Y205/01061 . . Hydroxymethylbilane synthase (2.5.1.61) [N1202]
C12Y205/01062 . . Chlorophyll synthase (2.5.1.62) [N1204]
C12Y205/01063 . . Adenosyl-fluoride synthase (2.5.1.63) [N1204]
C12Y205/01064 . . 2-Succinyl-6-hydroxy-2,4-cyclohexadiene-1-carboxylate synthase (2.5.1.64) (C12Y202/01009, C12Y402/99020 take precedence) [N1204]
C12Y205/01065 . . O-Phosphoserine sulfhydrylase (2.5.1.65) [N1204]
C12Y205/01066 . . N2-(2-Carboxyethyl)arginine synthase (2.5.1.66) [N1204]
C12Y205/01067 . . Chrysanthemyl diphosphate synthase (2.5.1.67) [N1204]
C12Y205/01068 . . (2Z,6E)-Farnesyl diphosphate synthase (2.5.1.68) [N1204]
C12Y205/01069 . . Lavandulyl diphosphate synthase (2.5.1.69) [N1204]
C12Y205/01070 . . Naringenin 8-dimethylallyltransferase (2.5.1.70) [N1204]
C12Y205/01071 . . Leachianone-G 2''-dimethylallyltransferase (2.5.1.71) [N1204]
C12Y205/01072 . . Quinolinate synthase (2.5.1.72) [N1204]
C12Y205/01073 . . O-Phospho-L-seryl-tRNA:Cys-tRNA synthase (2.5.1.73) [N1204]
C12Y205/01074 . . 1,4-Dihydroxy-2-naphthoate polyprenyltransferase (2.5.1.74) [N1204]
C12Y205/01075 . . tRNA dimethylallyltransferase (2.5.1.75) [N1204]
C12Y205/01076 . . Cysteate synthase (2.5.1.76) [N1204]
C12Y205/01077 . . 7,8-Didemethyl-8-hydroxy-5-deazariboflavin synthase (2.5.1.77) [N1204]
C12Y205/01078 . . 6,7-Dimethyl-8-ribityllumazine synthase (2.5.1.78) [N1204]
C12Y205/01079 . . Thermospermine synthase (2.5.1.79) [N1204]
C12Y205/01080 . . 7-Dimethylallyltryptophan synthase (2.5.1.80) [N1204]
C12Y205/01081 . . Geranylfarnesyl diphosphate synthase (2.5.1.81) [N1204]
C12Y205/01082 . . Hexaprenyl diphosphate synthase (geranylgeranyl-diphosphate specific) (2.5.1.82) [N1204]
C12Y205/01083 . . Hexaprenyl-diphosphate synthase ((2E,6E)-farnesyl-diphosphate specific) (2.5.1.83) [N1204]
C12Y205/01084 . . All-trans-nonaprenyl-diphosphate synthase (geranyl-diphosphate specific) (2.5.1.84) [N1204]
C12Y205/01085 . . All-trans-nonaprenyl-diphosphate synthase (geranylgeranyl-diphosphate specific) (2.5.1.85) [N1204]
C12Y205/01086 . . Trans,polycis-decaprenyl diphosphate synthase (2.5.1.86) [N1204]
C12Y205/01087 . . Ditrans,polycis-polyprenyl diphosphate synthase ((2E,6E)-farnesyl diphosphate specific) (2.5.1.87) [N1204]

C12Y205/01088 . . Trans,polycis-polyprenyl diphosphate synthase ((2Z,6E)-farnesyl diphosphate specific) (2.5.1.88) [N1204]
C12Y205/01089 . . Tritrans,polycis-undecaprenyl-diphosphate synthase (geranylgeranyl-diphosphate specific) (2.5.1.89) [N1204]
C12Y205/01090 . . All-trans-octaprenyl-diphosphate synthase (2.5.1.90) [N1204]
C12Y205/01091 . . All-trans-decaprenyl-diphosphate synthase (2.5.1.91) [N1204]
C12Y205/01092 . . (2Z,6Z)-Farnesyl diphosphate synthase (2.5.1.92) [N1204]
C12Y205/01093 . . 4-Hydroxybenzoate geranyltransferase (2.5.1.93) [N1204]
C12Y205/01094 . . Adenosyl-chloride synthase (2.5.1.94) [N1204]
C12Y205/01095 . . Ketal pyruvate transferase (2.5.1.95) [N1204]
C12Y205/01096 . . 4,4'-diapophytoene synthase (2.5.1.96) [N1204]
C12Y205/01097 . . Pseudaminic acid synthase (2.5.1.97) [N1204]

C12Y206/00 Transferases transferring nitrogenous groups (2.6) [N1202]

C12Y206/01 . Transaminases (2.6.1) [N1202]
C12Y206/01001 . . Aspartate transaminase (2.6.1.1), i.e. aspartate-aminotransferase [N1202]
C12Y206/01002 . . Alanine transaminase (2.6.1.2), i.e. alanine-aminotransferase [N1202]
C12Y206/01003 . . Cysteine transaminase (2.6.1.3) [N1204]
C12Y206/01004 . . Glycine transaminase (2.6.1.4) [N1204]
C12Y206/01005 . . Tyrosine transaminase (2.6.1.5) [N1202]
C12Y206/01006 . . Leucine transaminase (2.6.1.6) [N1204]
C12Y206/01007 . . Kynurenine--oxoglutarate transaminase (2.6.1.7) [N1204]
C12Y206/01008 . . 2,5-Diaminovalerate transaminase (2.6.1.8) [N1204]
C12Y206/01009 . . Histidinol-phosphate transaminase (2.6.1.9) [N1202]
C12Y206/01011 . . Acetylornithine transaminase (2.6.1.11) [N1202]
C12Y206/01012 . . Alanine--oxo-acid transaminase (2.6.1.12) [N1204]
C12Y206/01013 . . Ornithine aminotransferase (2.6.1.13) [N1204]
C12Y206/01014 . . Asparagine--oxo-acid transaminase (2.6.1.14) [N1204]
C12Y206/01015 . . Glutamine--pyruvate transaminase (2.6.1.15) [N1204]
C12Y206/01016 . . Glutamine-fructose-6-phosphate transaminase (isomerizing) (2.6.1.16), i.e. glucosamine-6-phosphate-synthase [N1202]
C12Y206/01017 . . Succinyldiaminopimelate transaminase (2.6.1.17) [N1204]
C12Y206/01018 . . Beta-alanine-pyruvate transaminase (2.6.1.18) [N1202]
C12Y206/01019 . . 4-Aminobutyrate transaminase (2.6.1.19) [N1204]
C12Y206/01021 . . D-Amino-acid transaminase (2.6.1.21), i.e. D-alanine aminotransferase/transaminase or D-aspartic aminotransferase/transaminase [N1202]
C12Y206/01022 . . (S)-3-Amino-2-methylpropionate transaminase (2.6.1.22) [N1204]
C12Y206/01023 . . 4-Hydroxyglutamate transaminase (2.6.1.23) [N1204]
C12Y206/01024 . . Diiodotyrosine transaminase (2.6.1.24) [N1204]
C12Y206/01026 . . Thyroid-hormone transaminase (2.6.1.26) [N1204]
C12Y206/01027 . . Tryptophan transaminase (2.6.1.27) [N1204]
C12Y206/01028 . . Tryptophan--phenylpyruvate transaminase (2.6.1.28) [N1204]

C12Y206/01029 . . Diamine transaminase (2.6.1.29) [N1204]
C12Y206/01030 . . Pyridoxamine--pyruvate transaminase (2.6.1.30) [N1204]
C12Y206/01031 . . Pyridoxamine--oxaloacetate transaminase (2.6.1.31) [N1204]
C12Y206/01032 . . Valine--3-methyl-2-oxovalerate transaminase (2.6.1.32) [N1204]
C12Y206/01033 . . dTDP-4-amino-4,6-dideoxy-D-glucose transaminase (2.6.1.33) [N1204]
C12Y206/01034 . . UDP-2-acetamido-4-amino-2,4,6-trideoxyglucose transaminase (2.6.1.34) [N1204]
C12Y206/01035 . . Glycine--oxaloacetate transaminase (2.6.1.35) [N1204]
C12Y206/01036 . . L-Lysine 6-transaminase (2.6.1.36) [N1204]
C12Y206/01037 . . 2-Aminoethylphosphonate--pyruvate transaminase (2.6.1.37) [N1204]
C12Y206/01038 . . Histidine transaminase (2.6.1.38) [N1204]
C12Y206/01039 . . 2-Aminoadipate transaminase (2.6.1.39) [N1202]
C12Y206/01040 . . (R)-3-Amino-2-methylpropionate--pyruvate transaminase (2.6.1.40) [N1204]
C12Y206/01041 . . D-Methionine--pyruvate transaminase (2.6.1.41) [N1204]
C12Y206/01042 . . Branched-chain-amino-acid transaminase (2.6.1.42) [N1204]
C12Y206/01043 . . Aminolevulinate transaminase (2.6.1.43) [N1204]
C12Y206/01044 . . Alanine--glyoxylate transaminase (2.6.1.44) [N1204]
C12Y206/01045 . . Serine--glyoxylate transaminase (2.6.1.45) [N1204]
C12Y206/01046 . . Diaminobutyrate--pyruvate transaminase (2.6.1.46) [N1204]
C12Y206/01047 . . Alanine--oxomalonate transaminase (2.6.1.47) [N1204]
C12Y206/01048 . . 5-Aminovalerate transaminase (2.6.1.48) [N1204]
C12Y206/01049 . . Dihydroxyphenylalanine transaminase (2.6.1.49) [N1204]
C12Y206/01050 . . Glutamine--scyllo-inositol transaminase (2.6.1.50) [N1204]
C12Y206/01051 . . Serine--pyruvate transaminase (2.6.1.51) [N1204]
C12Y206/01052 . . Phosphoserine transaminase (2.6.1.52) [N1204]
C12Y206/01054 . . Pyridoxamine-phosphate transaminase (2.6.1.54) [N1204]
C12Y206/01055 . . Taurine--2-oxoglutarate transaminase (2.6.1.55) [N1204]
C12Y206/01056 . . 1D-1-Guanidino-3-amino-1,3-dideoxy-scyllo-inositol transaminase (2.6.1.56) [N1204]
C12Y206/01057 . . Aromatic-amino-acid transaminase (2.6.1.57) [N1204]
C12Y206/01058 . . Phenylalanine(histidine) transaminase (2.6.1.58) [N1204]
C12Y206/01059 . . dTDP-4-amino-4,6-dideoxygalactose transaminase (2.6.1.59) [N1204]
C12Y206/01060 . . Aromatic-amino-acid--glyoxylate transaminase (2.6.1.60) [N1204]
C12Y206/01062 . . Adenosylmethionine--8-amino-7-oxononanoate transaminase (2.6.1.62) [N1204]
C12Y206/01063 . . Kynurenine--glyoxylate transaminase (2.6.1.63) [N1204]
C12Y206/01064 . . Glutamine-phenylpyruvate transaminase (2.6.1.64) [N1202]
C12Y206/01065 . . N6-Acetyl-beta-lysine transaminase (2.6.1.65) [N1204]
C12Y206/01066 . . Valine--pyruvate transaminase (2.6.1.66) [N1204]
C12Y206/01067 . . 2-Aminohexanoate transaminase (2.6.1.67) [N1204]
C12Y206/01068 . . Ornithine(lysine) transaminase (2.6.1.68) [N1204]
C12Y206/01070 . . Aspartate--phenylpyruvate transaminase (2.6.1.70) [N1204]
C12Y206/01071 . . Lysine--pyruvate 6-transaminase (2.6.1.71) [N1204]
C12Y206/01072 . . D-4-Hydroxyphenylglycine transaminase (2.6.1.72) [N1204]

C12Y206/01073 . . Methionine--glyoxylate transaminase (2.6.1.73) [N1204]
C12Y206/01074 . . Cephalosporin-C transaminase (2.6.1.74) [N1204]
C12Y206/01075 . . Cysteine-conjugate transaminase (2.6.1.75) [N1204]
C12Y206/01076 . . Diaminobutyrate--2-oxoglutarate transaminase (2.6.1.76) [N1204]
C12Y206/01077 . . Taurine--pyruvate aminotransferase (2.6.1.77) [N1204]
C12Y206/01078 . . Aspartate--prephenate aminotransferase (2.6.1.78) [N1204]
C12Y206/01079 . . Glutamate--prephenate aminotransferase (2.6.1.79) [N1204]
C12Y206/01080 . . Nicotianamine aminotransferase (2.6.1.80) [N1204]
C12Y206/01081 . . Succinylornithine transaminase (2.6.1.81) [N1204]
C12Y206/01082 . . Putrescine aminotransferase (2.6.1.82) [N1204]
C12Y206/01083 . . LL-Diaminopimelate aminotransferase (2.6.1.83) [N1204]
C12Y206/01084 . . Arginine--pyruvate transaminase (2.6.1.84) [N1204]
C12Y206/01085 . . Aminodeoxychorismate synthase (2.6.1.85) [N1204]
C12Y206/01086 . . 2-Amino-4-deoxychorismate synthase (2.6.1.86) [N1204]
C12Y206/01087 . . UDP-4-amino-4-deoxy-L-arabinose aminotransferase (2.6.1.87) [N1204]
C12Y206/01088 . . Methionine transaminase (2.6.1.88) [N1204]
C12Y206/01089 . . dTDP-3-amino-3,6-dideoxy-alpha-D-glucopyranose transaminase (2.6.1.89) [N1204]
C12Y206/01090 . . dTDP-3-amino-3,6-dideoxy-alpha-D-galactopyranose transaminase (2.6.1.90) [N1204]
C12Y206/01091 . . UDP-4-amino-4,6-dideoxy-alpha-D-N-acetyl-D-glucosamine transaminase (2.6.1.91) [N1204]
C12Y206/01092 . . UDP-4-amino-4,6-dideoxy-L-N-acetyl-beta-L-altrosamine transaminase (2.6.1.92) [N1204]

C12Y206/03 . Oximinotransferases (2.6.3) [N1204]
C12Y206/03001 . . Oximinotransferase (2.6.3.1) [N1204]

C12Y206/99 . transferring other nitrogenous groups (2.6.99) [N1204]
C12Y206/99001 . . dATP(dGTP)--DNA purinetransferase (2.6.99.1) [N1204]
C12Y206/99002 . . Pyridoxine 5'-phosphate synthase (2.6.99.2) [N1204]

C12Y207/00 Transferases transferring phosphorus-containing groups (2.7) [N1202]

C12Y207/01 . Phosphotransferases with an alcohol group as acceptor (2.7.1) [N1202]
C12Y207/01001 . . Hexokinase (2.7.1.1) [N1202]
C12Y207/01002 . . Glucokinase (2.7.1.2) [N1202]
C12Y207/01003 . . Ketohexokinase (2.7.1.3) [N1204]
C12Y207/01004 . . Fructokinase (2.7.1.4) [N1202]
C12Y207/01005 . . Rhamnulokinase (2.7.1.5) [N1204]
C12Y207/01006 . . Galactokinase (2.7.1.6) [N1202]
C12Y207/01007 . . Mannokinase (2.7.1.7) [N1204]
C12Y207/01008 . . Glucosamine kinase (2.7.1.8) [N1204]
C12Y207/01010 . . Phosphoglucokinase (2.7.1.10) [N1204]

C12Y207/01011 . . 6-Phosphofructokinase (2.7.1.11) [N1202]
C12Y207/01012 . . Gluconokinase (2.7.1.12) [N1204]
C12Y207/01013 . . Dehydrogluconokinase (2.7.1.13) [N1204]
C12Y207/01014 . . Sedoheptulokinase (2.7.1.14) [N1204]
C12Y207/01015 . . Ribokinase (2.7.1.15) [N1204]
C12Y207/01016 . . Ribulokinase (2.7.1.16) [N1202]
C12Y207/01017 . . Xylulokinase (2.7.1.17) [N1202]
C12Y207/01018 . . Phosphoribokinase (2.7.1.18) [N1202]
C12Y207/01019 . . Phosphoribulokinase (2.7.1.19) [N1202]
C12Y207/01020 . . Adenosine kinase (2.7.1.20) [N1202]
C12Y207/01021 . . Thymidine kinase (2.7.1.21) [N1202]
C12Y207/01022 . . Ribosylnicotinamide kinase (2.7.1.22) [N1204]
C12Y207/01023 . . NAD+ kinase (2.7.1.23) [N1202]
C12Y207/01024 . . Dephospho-CoA kinase (2.7.1.24) [N1204]
C12Y207/01025 . . Adenylyl-sulfate kinase (2.7.1.25) [N1204]
C12Y207/01026 . . Riboflavin kinase (2.7.1.26) [N1202]
C12Y207/01027 . . Erythritol kinase (2.7.1.27) [N1204]
C12Y207/01028 . . Triokinase (2.7.1.28) [N1204]
C12Y207/01029 . . Glycerone kinase (2.7.1.29), i.e. dihydroxyacetone kinase [N1202]
C12Y207/01030 . . Glycerol kinase (2.7.1.30) [N1202]
C12Y207/01031 . . Glycerate kinase (2.7.1.31) [N1204]
C12Y207/01032 . . Choline kinase (2.7.1.32) [N1202]
C12Y207/01033 . . Pantothenate kinase (2.7.1.33) [N1202]
C12Y207/01034 . . Pantetheine kinase (2.7.1.34) [N1204]
C12Y207/01035 . . Pyridoxal kinase (2.7.1.35) [N1202]
C12Y207/01036 . . Mevalonate kinase (2.7.1.36) [N1202]
C12Y207/01037 . . Protein kinase (2.7.1.37) (C12Y207/11001, C12Y207/11008-C12Y207/11013, C12Y207/11021, C12Y207/11022, C12Y207/11024, C12Y207/11025, C12Y207/11030 or C12Y207/12001 takes precedence) [N1202]
C12Y207/01039 . . Homoserine kinase (2.7.1.39) [N1202]
C12Y207/01040 . . Pyruvate kinase (2.7.1.40) [N1202]
C12Y207/01041 . . Glucose-1-phosphate phosphodismutase (2.7.1.41) [N1204]
C12Y207/01042 . . Riboflavin phosphotransferase (2.7.1.42) [N1204]
C12Y207/01043 . . Glucuronokinase (2.7.1.43) [N1204]
C12Y207/01044 . . Galacturonokinase (2.7.1.44) [N1204]
C12Y207/01045 . . 2-Dehydro-3-deoxygluconokinase (2.7.1.45) [N1204]
C12Y207/01046 . . L-Arabinokinase (2.7.1.46) [N1204]
C12Y207/01047 . . D-Ribulokinase (2.7.1.47) [N1204]
C12Y207/01048 . . Uridine kinase (2.7.1.48) [N1202]
C12Y207/01049 . . Hydroxymethylpyrimidine kinase (2.7.1.49) [N1204]
C12Y207/01050 . . Hydroxyethylthiazole kinase (2.7.1.50) [N1204]
C12Y207/01051 . . L-Fuculokinase (2.7.1.51) [N1204]
C12Y207/01052 . . Fucokinase (2.7.1.52) [N1204]

C12Y207/01053 . . L-Xylulokinase (2.7.1.53) [N1204]
C12Y207/01054 . . D-Arabinokinase (2.7.1.54) [N1204]
C12Y207/01055 . . Allose kinase (2.7.1.55) [N1204]
C12Y207/01056 . . 1-Phosphofructokinase (2.7.1.56) [N1204]
C12Y207/01058 . . 2-Dehydro-3-deoxygalactonokinase (2.7.1.58) [N1204]
C12Y207/01059 . . N-Acetylglucosamine kinase (2.7.1.59) [N1202]
C12Y207/01060 . . N-Acylmannosamine kinase (2.7.1.60) [N1204]
C12Y207/01061 . . Acyl-phosphate--hexose phosphotransferase (2.7.1.61) [N1204]
C12Y207/01062 . . Phosphoramidate--hexose phosphotransferase (2.7.1.62) [N1204]
C12Y207/01063 . . Polyphosphate--glucose phosphotransferase (2.7.1.63) [N1204]
C12Y207/01064 . . Inositol 3-kinase (2.7.1.64) [N1204]
C12Y207/01065 . . Scyllo-inosamine 4-kinase (2.7.1.65) [N1204]
C12Y207/01066 . . Undecaprenol kinase (2.7.1.66) [N1204]
C12Y207/01067 . . 1-Phosphatidylinositol 4-kinase (2.7.1.67) [N1204]
C12Y207/01068 . . 1-Phosphatidylinositol-4-phosphate 5-kinase (2.7.1.68) [N1202]
C12Y207/01069 . . Protein-Npi-phosphohistidine-sugar phosphotransferase (2.7.1.69), i.e. sucrose phosphotransferase system II [N1202]
C12Y207/01071 . . Shikimate kinase (2.7.1.71) [N1202]
C12Y207/01072 . . Streptomycin 6-kinase (2.7.1.72) [N1204]
C12Y207/01073 . . Inosine kinase (2.7.1.73) [N1204]
C12Y207/01074 . . Deoxycytidine kinase (2.7.1.74) [N1202]
C12Y207/01076 . . Deoxyadenosine kinase (2.7.1.76) [N1202]
C12Y207/01077 . . Nucleoside phosphotransferase (2.7.1.77) [N1204]
C12Y207/01078 . . Polynucleotide 5'-hydroxyl-kinase (2.7.1.78) [N1202]
C12Y207/01079 . . Diphosphate--glycerol phosphotransferase (2.7.1.79) [N1204]
C12Y207/01080 . . Diphosphate--serine phosphotransferase (2.7.1.80) [N1204]
C12Y207/01081 . . Hydroxylysine kinase (2.7.1.81) [N1204]
C12Y207/01082 . . Ethanolamine kinase (2.7.1.82) [N1204]
C12Y207/01083 . . Pseudouridine kinase (2.7.1.83) [N1204]
C12Y207/01084 . . Alkylglycerone kinase (2.7.1.84) [N1204]
C12Y207/01085 . . Beta-glucoside kinase (2.7.1.85) [N1204]
C12Y207/01086 . . NADH kinase (2.7.1.86) [N1204]
C12Y207/01087 . . Streptomycin 3"-kinase (2.7.1.87) [N1204]
C12Y207/01088 . . Dihydrostreptomycin-6-phosphate 3'-alpha-kinase (2.7.1.88) [N1204]
C12Y207/01089 . . Thiamine kinase (2.7.1.89) [N1204]
C12Y207/01090 . . Diphosphate--fructose-6-phosphate 1-phosphotransferase (2.7.1.90) [N1204]
C12Y207/01091 . . Sphinganine kinase (2.7.1.91) [N1202]
C12Y207/01092 . . 5-Dehydro-2-deoxygluconokinase (2.7.1.92) [N1204]
C12Y207/01093 . . Alkylglycerol kinase (2.7.1.93) [N1204]
C12Y207/01094 . . Acylglycerol kinase (2.7.1.94) [N1204]
C12Y207/01095 . . Kanamycin kinase (2.7.1.95), i.e. neomycin-kanamycin phosphotransferase [N1202]
C12Y207/01100 . . S-Methyl-5-thioribose kinase (2.7.1.100) [N1204]

C12Y207/01101 . . Tagatose kinase (2.7.1.101) [N1202]
C12Y207/01102 . . Hamamelose kinase (2.7.1.102) [N1204]
C12Y207/01103 . . Viomycin kinase (2.7.1.103) [N1204]
C12Y207/01105 . . 6-Phosphofructo-2-kinase (2.7.1.105) [N1202]
C12Y207/01106 . . Glucose-1,6-bisphosphate synthase (2.7.1.106) [N1204]
C12Y207/01107 . . Diacylglycerol kinase (2.7.1.107) [N1204]
C12Y207/01108 . . Dolichol kinase (2.7.1.108) [N1202]
C12Y207/01112 . . Protein-tyrosine kinase (2.7.1.112) (C12Y207/10001, C12Y207/10002 take precedence) [N1204]
C12Y207/01113 . . Deoxyguanosine kinase (2.7.1.113) [N1204]
C12Y207/01114 . . AMP--thymidine kinase (2.7.1.114) [N1204]
C12Y207/01118 . . ADP--thymidine kinase (2.7.1.118) [N1204]
C12Y207/01119 . . Hygromycin-B 7''-O-kinase (2.7.1.119) [N1204]
C12Y207/01121 . . Phosphoenolpyruvate--glycerone phosphotransferase (2.7.1.121) [N1204]
C12Y207/01122 . . Xylitol kinase (2.7.1.122) [N1204]
C12Y207/01127 . . Inositol-trisphosphate 3-kinase (2.7.1.127) [N1204]
C12Y207/01130 . . Tetraacyldisaccharide 4'-kinase (2.7.1.130) [N1204]
C12Y207/01134 . . Inositol-tetrakisphosphate 1-kinase (2.7.1.134) [N1204]
C12Y207/01136 . . Macrolide 2'-kinase (2.7.1.136) [N1204]
C12Y207/01137 . . Phosphatidylinositol 3-kinase (2.7.1.137) [N1202]
C12Y207/01138 . . Ceramide kinase (2.7.1.138) [N1202]
C12Y207/01140 . . Inositol-tetrakisphosphate 5-kinase (2.7.1.140) [N1204]
C12Y207/01142 . . Glycerol-3-phosphate--glucose phosphotransferase (2.7.1.142) [N1204]
C12Y207/01143 . . Diphosphate-purine nucleoside kinase (2.7.1.143) [N1204]
C12Y207/01144 . . Tagatose-6-phosphate kinase (2.7.1.144) [N1204]
C12Y207/01145 . . Deoxynucleoside kinase (2.7.1.145) [N1204]
C12Y207/01146 . . ADP-specific phosphofructokinase (2.7.1.146) [N1204]
C12Y207/01147 . . ADP-specific glucokinase (2.7.1.147) [N1204]
C12Y207/01148 . . 4-(Cytidine 5'-diphospho)-2-C-methyl-D-erythritol kinase (2.7.1.148) [N1204]
C12Y207/01149 . . 1-Phosphatidylinositol-5-phosphate 4-kinase (2.7.1.149) [N1204]
C12Y207/01150 . . 1-Phosphatidylinositol-3-phosphate 5-kinase (2.7.1.150) [N1204]
C12Y207/01151 . . Inositol-polyphosphate multikinase (2.7.1.151) [N1204]
C12Y207/01153 . . Phosphatidylinositol-4,5-bisphosphate 3-kinase (2.7.1.153), i.e. phosphoinositide 3-kinase [N1202]
C12Y207/01154 . . Phosphatidylinositol-4-phosphate 3-kinase (2.7.1.154) [N1204]
C12Y207/01156 . . Adenosylcobinamide kinase (2.7.1.156) [N1204]
C12Y207/01157 . . N-Acetylgalactosamine kinase (2.7.1.157) [N1204]
C12Y207/01158 . . Inositol-pentakisphosphate 2-kinase (2.7.1.158) [N1204]
C12Y207/01159 . . Inositol-1,3,4-trisphosphate 5/6-kinase (2.7.1.159) [N1204]
C12Y207/01160 . . 2'-Phosphotransferase (2.7.1.160) [N1204]
C12Y207/01161 . . CTP-dependent riboflavin kinase (2.7.1.161) [N1204]
C12Y207/01162 . . N-Acetylhexosamine 1-kinase (2.7.1.162) [N1204]
C12Y207/01163 . . Hygromycin B 4-O-kinase (2.7.1.163) [N1204]

C12Y207/01164 . . O-Phosphoseryl-tRNA(Sec) kinase (2.7.1.164) [N1204]
C12Y207/01165 . . Glycerate 2-kinase (2.7.1.165) [N1204]
C12Y207/01166 . . 3-Deoxy-D-manno-octulosonic acid kinase (2.7.1.166) [N1204]
C12Y207/01167 . . D-Glycero-beta-D-manno-heptose-7-phosphate kinase (2.7.1.167) [N1204]
C12Y207/01168 . . D-Glycero-alpha-D-manno-heptose-7-phosphate kinase (2.7.1.168) [N1204]
C12Y207/01169 . . Pantoate kinase (2.7.1.169) [N1204]
C12Y207/01170 . . Anhydro-N-acetylmuramic acid kinase (2.7.1.170) [N1204]
C12Y207/01171 . . Protein-fructosamine 3-kinase (2.7.1.171) [N1204]
C12Y207/01172 . . Protein-ribulosamine 3-kinase (2.7.1.172) [N1204]

C12Y207/02 . Phosphotransferases with a carboxy group as acceptor (2.7.2) [N1202]
C12Y207/02001 . . Acetate kinase (2.7.2.1) [N1202]
C12Y207/02002 . . Carbamate kinase (2.7.2.2) [N1204]
C12Y207/02003 . . Phosphoglycerate kinase (2.7.2.3) [N1202]
C12Y207/02004 . . Aspartate kinase (2.7.2.4) [N1202]
C12Y207/02006 . . Formate kinase (2.7.2.6) [N1204]
C12Y207/02007 . . Butyrate kinase (2.7.2.7) [N1204]
C12Y207/02008 . . Acetylglutamate kinase (2.7.2.8) [N1202]
C12Y207/02010 . . Phosphoglycerate kinase (GTP) (2.7.2.10) [N1204]
C12Y207/02011 . . Glutamate 5-kinase (2.7.2.11) [N1204]
C12Y207/02012 . . Acetate kinase (diphosphate) (2.7.2.12) [N1204]
C12Y207/02013 . . Glutamate 1-kinase (2.7.2.13) [N1204]
C12Y207/02014 . . Branched-chain-fatty-acid kinase (2.7.2.14) [N1204]
C12Y207/02015 . . Propionate kinase (2.7.2.15) [N1204]

C12Y207/03 . Phosphotransferases with a nitrogenous group as acceptor (2.7.3) [N1202]
C12Y207/03001 . . Guanidinoacetate kinase (2.7.3.1) [N1204]
C12Y207/03002 . . Creatine kinase (2.7.3.2) [N1202]
C12Y207/03003 . . Arginine kinase (2.7.3.3) [N1204]
C12Y207/03004 . . Taurocyamine kinase (2.7.3.4) [N1204]
C12Y207/03005 . . Lombricine kinase (2.7.3.5) [N1204]
C12Y207/03006 . . Hypotaurocyamine kinase (2.7.3.6) [N1204]
C12Y207/03007 . . Opheline kinase (2.7.3.7) [N1204]
C12Y207/03008 . . Ammonia kinase (2.7.3.8) [N1204]
C12Y207/03009 . . Phosphoenolpyruvate-protein phosphotransferase (2.7.3.9) [N1202]
C12Y207/03010 . . Agmatine kinase (2.7.3.10) [N1204]

C12Y207/04 . Phosphotransferases with a phosphate group as acceptor (2.7.4) [N1202]
C12Y207/04001 . . Polyphosphate kinase (2.7.4.1) [N1202]
C12Y207/04002 . . Phosphomevalonate kinase (2.7.4.2) [N1202]
C12Y207/04003 . . Adenylate kinase (2.7.4.3) [N1202]
C12Y207/04004 . . Nucleoside-phosphate kinase (2.7.4.4) [N1202]
C12Y207/04006 . . Nucleoside-diphosphate kinase (2.7.4.6) [N1202]

C12Y207/04007 . . Phosphomethylpyrimidine kinase (2.7.4.7) [N1204]
C12Y207/04008 . . Guanylate kinase (2.7.4.8) [N1202]
C12Y207/04009 . . dTMP kinase (2.7.4.9) [N1202]
C12Y207/04010 . . Nucleoside-triphosphate--adenylate kinase (2.7.4.10) [N1204]
C12Y207/04011 . . (Deoxy)adenylate kinase (2.7.4.11) [N1204]
C12Y207/04012 . . T(2)-Induced deoxynucleotide kinase (2.7.4.12) [N1204]
C12Y207/04013 . . (Deoxy)nucleoside-phosphate kinase (2.7.4.13) [N1204]
C12Y207/04014 . . UMP/CMP kinase (2.7.4.14), i.e. uridine monophosphate kinase [N1202]
C12Y207/04015 . . Thiamine-diphosphate kinase (2.7.4.15) [N1204]
C12Y207/04016 . . Thiamine-phosphate kinase (2.7.4.16) [N1204]
C12Y207/04017 . . 3-Phosphoglyceroyl-phosphate--polyphosphate phosphotransferase (2.7.4.17) [N1204]
C12Y207/04018 . . Farnesyl-diphosphate kinase (2.7.4.18) [N1204]
C12Y207/04019 . . 5-Methyldeoxycytidine-5'-phosphate kinase (2.7.4.19) [N1204]
C12Y207/04020 . . Dolichyl-diphosphate--polyphosphate phosphotransferase (2.7.4.20) [N1204]
C12Y207/04021 . . Inositol-hexakisphosphate kinase (2.7.4.21) [N1204]
C12Y207/04022 . . UMP kinase (2.7.4.22) [N1204]
C12Y207/04023 . . Ribose 1,5-bisphosphate phosphokinase (2.7.4.23) [N1204]
C12Y207/04024 . . Diphosphoinositol-pentakisphosphate kinase (2.7.4.24) [N1204]
C12Y207/04025 . . (d)CMP kinase (2.7.4.25) [N1204]

C12Y207/06 . Diphosphotransferases (2.7.6) [N1202]
C12Y207/06001 . . Ribose-phosphate diphosphokinase (2.7.6.1) [N1202]
C12Y207/06002 . . Thiamine diphosphokinase (2.7.6.2) [N1204]
C12Y207/06003 . . 2-Amino-4-hydroxy-6-hydroxymethyldihydropteridine diphosphokinase (2.7.6.3) [N1204]
C12Y207/06004 . . Nucleotide diphosphokinase (2.7.6.4) [N1204]
C12Y207/06005 . . GTP diphosphokinase (2.7.6.5) [N1204]

C12Y207/07 . Nucleotidyltransferases (2.7.7) [N1202]
C12Y207/07001 . . Nicotinamide-nucleotide adenylyltransferase (2.7.7.1) [N1204]
C12Y207/07002 . . FAD synthetase (2.7.7.2) [N1204]
C12Y207/07003 . . Pantetheine-phosphate adenylyltransferase (2.7.7.3) [N1202]
C12Y207/07004 . . Sulfate adenylyltransferase (2.7.7.4) [N1204]
C12Y207/07005 . . Sulfate adenylyltransferase (ADP) (2.7.7.5) [N1204]
C12Y207/07006 . . DNA-directed RNA polymerase (2.7.7.6) [N1202]
C12Y207/07007 . . DNA-directed DNA polymerase (2.7.7.7), i.e. DNA replicase [N1202]
C12Y207/07008 . . Polyribonucleotide nucleotidyltransferase (2.7.7.8), i.e. polynucleotide phosphorylase [N1202]
C12Y207/07009 . . UTP-glucose-1-phosphate uridylyltransferase (2.7.7.9), i.e. UDP-glucose-pyrophosphorylase [N1202]
C12Y207/07010 . . UTP--hexose-1-phosphate uridylyltransferase (2.7.7.10) [N1204]
C12Y207/07011 . . UTP--xylose-1-phosphate uridylyltransferase (2.7.7.11) [N1204]
C12Y207/07012 . . UDP-glucose--hexose-1-phosphate uridylyltransferase (2.7.7.12) [N1204]

C12Y207/07013 . . Mannose-1-phosphate guanylyltransferase (2.7.7.13) [N1204]
C12Y207/07014 . . Ethanolamine-phosphate cytidylyltransferase (2.7.7.14) [N1204]
C12Y207/07015 . . Choline-phosphate cytidylyltransferase (2.7.7.15) [N1204]
C12Y207/07018 . . Nicotinate-nucleotide adenylyltransferase (2.7.7.18) [N1202]
C12Y207/07019 . . Polynucleotide adenylyltransferase (2.7.7.19) [N1202]
C12Y207/07022 . . Mannose-1-phosphate guanylyltransferase (GDP) (2.7.7.22) [N1202]
C12Y207/07023 . . UDP-N-acetylglucosamine diphosphorylase (2.7.7.23) [N1202]
C12Y207/07024 . . Glucose-1-phosphate thymidylyltransferase (2.7.7.24) [N1202]
C12Y207/07027 . . Glucose-1-phosphate adenylyltransferase (2.7.7.27), i.e. ADP-glucose pyrophosphorylase [N1202]
C12Y207/07028 . . Nucleoside-triphosphate-aldose-1-phosphate nucleotidyltransferase (2.7.7.28) [N1204]
C12Y207/07030 . . Fucose-1-phosphate guanylyltransferase (2.7.7.30) [N1202]
C12Y207/07031 . . DNA nucleotidylexotransferase (2.7.7.31), i.e. terminal deoxynucleotidyl transferase [N1202]
C12Y207/07032 . . Galactose-1-phosphate thymidylyltransferase (2.7.7.32) [N1204]
C12Y207/07033 . . Glucose-1-phosphate cytidylyltransferase (2.7.7.33) [N1204]
C12Y207/07034 . . Glucose-1-phosphate guanylyltransferase (2.7.7.34) [N1204]
C12Y207/07035 . . Ribose-5-phosphate adenylyltransferase (2.7.7.35) [N1204]
C12Y207/07036 . . Aldose-1-phosphate adenylyltransferase (2.7.7.36) [N1204]
C12Y207/07037 . . Aldose-1-phosphate nucleotidyltransferase (2.7.7.37) [N1204]
C12Y207/07038 . . 3-Deoxy-manno-octulosonate cytidylyltransferase (2.7.7.38) [N1202]
C12Y207/07039 . . Glycerol-3-phosphate cytidylyltransferase (2.7.7.39) [N1204]
C12Y207/07040 . . D-Ribitol-5-phosphate cytidylyltransferase (2.7.7.40) [N1204]
C12Y207/07041 . . Phosphatidate cytidylyltransferase (2.7.7.41), i.e. CDP-diacylglycerol synthase [N1202]
C12Y207/07042 . . [Glutamate--ammonia-ligase adenylyltransferase (2.7.7.42) [N1204]
C12Y207/07043 . . N-Acylneuraminate cytidylyltransferase (2.7.7.43) [N1202]
C12Y207/07044 . . Glucuronate-1-phosphate uridylyltransferase (2.7.7.44) [N1204]
C12Y207/07045 . . Guanosine-triphosphate guanylyltransferase (2.7.7.45) [N1204]
C12Y207/07046 . . Gentamicin 2''-nucleotidyltransferase (2.7.7.46) [N1204]
C12Y207/07047 . . Streptomycin 3''-adenylyltransferase (2.7.7.47) [N1204]
C12Y207/07048 . . RNA-directed RNA polymerase (2.7.7.48), i.e. RNA replicase [N1202]
C12Y207/07049 . . RNA-directed DNA polymerase (2.7.7.49), i.e. telomerase or reverse-transcriptase [N1202]
C12Y207/07050 . . mRNA guanylyltransferase (2.7.7.50) [N1204]
C12Y207/07051 . . Adenylylsulfate--ammonia adenylyltransferase (2.7.7.51) [N1204]
C12Y207/07052 . . RNA uridylyltransferase (2.7.7.52) [N1202]
C12Y207/07053 . . ATP adenylyltransferase (2.7.7.53) [N1204]
C12Y207/07054 . . Phenylalanine adenylyltransferase (2.7.7.54) [N1204]
C12Y207/07055 . . Anthranilate adenylyltransferase (2.7.7.55) [N1204]
C12Y207/07056 . . tRNA nucleotidyltransferase (2.7.7.56) [N1204]
C12Y207/07057 . . N-Methylphosphoethanolamine cytidylyltransferase (2.7.7.57) [N1204]
C12Y207/07058 . . (2,3-Dihydroxybenzoyl)adenylate synthase (2.7.7.58) [N1204]

C12Y207/07059 . . [Protein-PII uridylyltransferase (2.7.7.59) [N1204]
C12Y207/07060 . . 2-C-Methyl-D-erythritol 4-phosphate cytidylyltransferase (2.7.7.60) [N1204]
C12Y207/07061 . . Citrate lyase holo-[acyl-carrier-protein synthase (2.7.7.61) [N1204]
C12Y207/07062 . . Adenosylcobinamide-phosphate guanylyltransferase (2.7.7.62) [N1204]
C12Y207/07063 . . Lipoate--protein ligase (2.7.7.63) [N1204]
C12Y207/07064 . . UTP-monosaccharide-1-phosphate uridylyltransferase (2.7.7.64) [N1204]
C12Y207/07065 . . Diguanylate cyclase (2.7.7.65) [N1202]
C12Y207/07066 . . Malonate decarboxylase holo-[acyl-carrier-protein synthase (2.7.7.66) [N1204]
C12Y207/07067 . . CDP-archaeol synthase (2.7.7.67) [N1204]
C12Y207/07068 . . 2-Phospho-L-lactate guanylyltransferase (2.7.7.68) [N1204]
C12Y207/07069 . . GDP-L-galactose phosphorylase (2.7.7.69) [N1204]
C12Y207/07070 . . D-Glycero-beta-D-manno-heptose 1-phosphate adenylyltransferase (2.7.7.70) [N1204]
C12Y207/07071 . . D-Glycero-alpha-D-manno-heptose 1-phosphate guanylyltransferase (2.7.7.71) [N1204]
C12Y207/07072 . . CCA tRNA nucleotidyltransferase (2.7.7.72) [N1204]
C12Y207/07073 . . Sulfur carrier protein ThiS adenylyltransferase (2.7.7.73) [N1204]
C12Y207/07074 . . 1L-Myo-inositol 1-phosphate cytidylyltransferase (2.7.7.74) [N1204]
C12Y207/07075 . . Molybdopterin adenylyltransferase (2.7.7.75) [N1204]
C12Y207/07076 . . Molybdenum cofactor cytidylyltransferase (2.7.7.76) [N1204]
C12Y207/07077 . . Molybdenum cofactor guanylyltransferase (2.7.7.77) [N1204]
C12Y207/07078 . . GDP-D-glucose phosphorylase (2.7.7.78) [N1204]
C12Y207/07079 . . tRNA(His) guanylyltransferase (2.7.7.79) [N1204]
C12Y207/07080 . . Molybdopterin-synthase adenylyltransferase (2.7.7.80) [N1204]

C12Y207/08 . Transferases for other substituted phosphate groups (2.7.8) [N1202]
C12Y207/08001 . . Ethanolaminephosphotransferase (2.7.8.1) [N1204]
C12Y207/08002 . . Diacylglycerol cholinephosphotransferase (2.7.8.2) [N1204]
C12Y207/08003 . . Ceramide cholinephosphotransferase (2.7.8.3) [N1204]
C12Y207/08004 . . Serine-phosphoethanolamine synthase (2.7.8.4) [N1204]
C12Y207/08005 . . CDP-diacylglycerol-glycerol-3-phosphate 3-phosphatidyltransferase (2.7.8.5) [N1202]
C12Y207/08006 . . Undecaprenyl-phosphate galactose phosphotransferase (2.7.8.6) [N1204]
C12Y207/08007 . . Holo-[acyl-carrier-protein synthase (2.7.8.7) [N1204]
C12Y207/08008 . . CDP-diacylglycerol--serine O-phosphatidyltransferase (2.7.8.8) [N1204]
C12Y207/08009 . . Phosphomannan mannosephosphotransferase (2.7.8.9) [N1204]
C12Y207/08010 . . Sphingosine cholinephosphotransferase (2.7.8.10) [N1204]
C12Y207/08011 . . CDP-diacylglycerol--inositol 3-phosphatidyltransferase (2.7.8.11) [N1204]
C12Y207/08012 . . CDP-glycerol glycerophosphotransferase (2.7.8.12) [N1202]
C12Y207/08013 . . Phospho-N-acetylmuramoyl-pentapeptide-transferase (2.7.8.13) [N1204]
C12Y207/08014 . . CDP-ribitol ribitolphosphotransferase (2.7.8.14) [N1204]
C12Y207/08015 . . UDP-N-acetylglucosamine--dolichyl-phosphate N-acetylglucosaminephosphotransferase (2.7.8.15) [N1204]
C12Y207/08017 . . UDP-N-acetylglucosamine--lysosomal-enzyme

etylglucosaminephosphotransferase (2.7.8.17) [N1204]

C12Y207/08018 . . UDP-galactose--UDP-N-acetylglucosamine galactose phosphotransferase (2.7.8.18) [N1204]
C12Y207/08019 . . UDP-glucose--glycoprotein glucose phosphotransferase (2.7.8.19) [N1204]
C12Y207/08020 . . Phosphatidylglycerol--membrane-oligosaccharide glycerophosphotransferase (2.7.8.20) [N1204]
C12Y207/08021 . . Membrane-oligosaccharide glycerophosphotransferase (2.7.8.21) [N1204]
C12Y207/08022 . . 1-Alkenyl-2-acylglycerol choline phosphotransferase (2.7.8.22) [N1204]
C12Y207/08023 . . Carboxyvinyl-carboxyphosphonate phosphorylmutase (2.7.8.23) [N1204]
C12Y207/08024 . . Phosphatidylcholine synthase (2.7.8.24) [N1204]
C12Y207/08025 . . Triphosphoribosyl-dephospho-CoA synthase (2.7.8.25) [N1204]
C12Y207/08026 . . Adenosylcobinamide-GDP ribazoletransferase (2.7.8.26) [N1204]
C12Y207/08027 . . Sphingomyelin synthase (2.7.8.27) [N1204]
C12Y207/08028 . . 2-Phospho-L-lactate transferase (2.7.8.28) [N1204]
C12Y207/08029 . . L-Serine-phosphatidylethanolamine phosphatidyltransferase (2.7.8.29) [N1204]
C12Y207/08030 . . Undecaprenyl-phosphate 4-deoxy-4-formamido-L-arabinose transferase (2.7.8.30) [N1204]
C12Y207/08031 . . Undecaprenyl-phosphate glucose phosphotransferase (2.7.8.31) [N1204]
C12Y207/08032 . . 3-O-Alpha-D-mannopyranosyl-alpha-D-mannopyranose xylosylphosphotransferase (2.7.8.32) [N1204]
C12Y207/08033 . . UDP-GlcNAc:undecaprenyl-phosphate GlcNAc-1-phosphate transferase (2.7.8.33) [N1204]
C12Y207/08034 . . CDP-L-myo-inositol myo-inositolphosphotransferase (2.7.8.34) [N1204]

C12Y207/09 . Phosphotransferases with paired acceptors (2.7.9) [N1202]
C12Y207/09001 . . Pyruvate, phosphate dikinase (2.7.9.1) [N1204]
C12Y207/09002 . . Pyruvate, water dikinase (2.7.9.2) [N1204]
C12Y207/09003 . . Selenide, water dikinase (2.7.9.3), i.e. selenophosphate-synthase [N1202]
C12Y207/09004 . . Alpha-glucan, water dikinase (2.7.9.4) [N1202]
C12Y207/09005 . . Phosphoglucan, water dikinase (2.7.9.5) [N1204]

C12Y207/10 . Protein-tyrosine kinases (2.7.10) [N1202]
C12Y207/10001 . . Receptor protein-tyrosine kinase (2.7.10.1) [N1202]
C12Y207/10002 . . Non-specific protein-tyrosine kinase (2.7.10.2), i.e. spleen tyrosine kinase [N1202]

C12Y207/11 . Protein-serine/threonine kinases (2.7.11) [N1202]
C12Y207/11001 . . Non-specific serine/threonine protein kinase (2.7.11.1), i.e. casein kinase or checkpoint kinase [N1202]
C12Y207/11002 . . [Pyruvate dehydrogenase (acetyl-transferring)] kinase (2.7.11.2) [N1202]
C12Y207/11003 . . Dephospho-[reductase kinase kinase (2.7.11.3) [N1204]
C12Y207/11004 . . [3-Methyl-2-oxobutanoate dehydrogenase (acetyl-transferring) kinase (2.7.11.4) [N1204]
C12Y207/11005 . . [Isocitrate dehydrogenase (NADP+) kinase (2.7.11.5) [N1204]
C12Y207/11006 . . [Tyrosine 3-monooxygenase kinase (2.7.11.6) [N1204]
C12Y207/11007 . . [Myosin-heavy-chain kinase (2.7.11.7) [N1204]

C12Y207/11008 . . Fas-activated serine/threonine kinase (2.7.11.8) [N1202]
C12Y207/11009 . . Goodpasture-antigen-binding protein kinase (2.7.11.9) [N1202]
C12Y207/11010 . . IkappaB kinase (2.7.11.10) [N1202]
C12Y207/11011 . . cAMP-dependent protein kinase (2.7.11.11) [N1202]
C12Y207/11012 . . cGMP-dependent protein kinase (2.7.11.12) [N1202]
C12Y207/11013 . . Protein kinase C (2.7.11.13) [N1202]
C12Y207/11014 . . Rhodopsin kinase (2.7.11.14) [N1204]
C12Y207/11015 . . [Beta-adrenergic-receptor kinase (2.7.11.15) [N1204]
C12Y207/11016 . . G-Protein-coupled receptor kinase (2.7.11.16) [N1202]
C12Y207/11017 . . Ca2+/Calmodulin-dependent protein kinase (2.7.11.17) [N1202]
C12Y207/11018 . . Myosin-light-chain kinase (2.7.11.18) [N1202]
C12Y207/11019 . . Phosphorylase kinase (2.7.11.19) [N1202]
C12Y207/11020 . . Elongation factor 2 kinase (2.7.11.20), i.e. eEF-2K [N1202]
C12Y207/11021 . . Polo kinase (2.7.11.21) [N1202]
C12Y207/11022 . . Cyclin-dependent kinase (2.7.11.22) [N1202]
C12Y207/11023 . . [RNA-polymerase-subunit kinase (2.7.11.23) [N1204]
C12Y207/11024 . . Mitogen-activated protein kinase (2.7.11.24), i.e. MAPK or MAPK2 or c-Jun N-terminal kinase [N1202]
C12Y207/11025 . . Mitogen-activated protein kinase kinase kinase (2.7.11.25), i.e MAPKKK or MAP3K [N1202]
C12Y207/11026 . . Tau-protein kinase (2.7.11.26) [N1202]
C12Y207/11027 . . [Acetyl-CoA carboxylase kinase (2.7.11.27) [N1204]
C12Y207/11028 . . Tropomyosin kinase (2.7.11.28) [N1204]
C12Y207/11029 . . [Low-density-lipoprotein receptor kinase (2.7.11.29) [N1204]
C12Y207/11030 . . Receptor protein serine/threonine kinase (2.7.11.30) [N1202]
C12Y207/11031 . . [Hydroxymethylglutaryl-CoA reductase (NADPH) kinase (2.7.11.31) [N1204]

C12Y207/12 . Dual-specificity kinases (2.7.12) [N1202]
C12Y207/12001 . . Dual-specificity kinase (2.7.12.1) [N1202]
C12Y207/12002 . . Mitogen-activated protein kinase kinase (2.7.12.2), i.e. MAPKK or MEK1 or MEK2 [N1202]

C12Y207/13 . Protein-histidine kinases (2.7.13) [N1202]
C12Y207/13001 . . Protein-histidine pros-kinase (2.7.13.1) [N1202]
C12Y207/13002 . . Protein-histidine tele-kinase (2.7.13.2) [N1202]
C12Y207/13003 . . Histidine kinase (2.7.13.3) [N1204]

C12Y207/99 . Other protein kinases (2.7.99) [N1204]
C12Y207/99001 . . Triphosphate--protein phosphotransferase (2.7.99.1) [N1204]

C12Y208/00 Transferases transferring sulfur-containing groups (2.8) [N1202]

C12Y208/01 . Sulfurtransferases (2.8.1) [N1204]
C12Y208/01001 . . Thiosulfate sulfurtransferase (2.8.1.1) [N1204]

C12Y208/01002 . . 3-Mercaptopyruvate sulfurtransferase (2.8.1.2) [N1204]
C12Y208/01003 . . Thiosulfate--thiol sulfurtransferase (2.8.1.3) [N1204]
C12Y208/01004 . . tRNA sulfurtransferase (2.8.1.4) [N1204]
C12Y208/01005 . . Thiosulfate--dithiol sulfurtransferase (2.8.1.5) [N1204]
C12Y208/01006 . . Biotin synthase (2.8.1.6) [N1204]
C12Y208/01007 . . Cysteine desulfurase (2.8.1.7) [N1204]
C12Y208/01008 . . Lipoyl synthase (2.8.1.8) [N1204]
C12Y208/01009 . . Molybdenum cofactor sulfurtransferase (2.8.1.9) [N1204]
C12Y208/01010 . . Thiazole synthase (2.8.1.10) [N1204]
C12Y208/01011 . . Molybdopterin synthase sulfurtransferase (2.8.1.11) [N1204]
C12Y208/01012 . . Molybdopterin synthase (2.8.1.12) [N1204]

C12Y208/02 . Sulfotransferases (2.8.2) [N1202]
C12Y208/02001 . . Aryl sulfotransferase (2.8.2.1) [N1204]
C12Y208/02002 . . Alcohol sulfotransferase (2.8.2.2) [N1204]
C12Y208/02003 . . Amine sulfotransferase (2.8.2.3) [N1204]
C12Y208/02004 . . Estrone sulfotransferase (2.8.2.4) [N1204]
C12Y208/02005 . . Chondroitin 4-sulfotransferase (2.8.2.5) [N1204]
C12Y208/02006 . . Choline sulfotransferase (2.8.2.6) [N1204]
C12Y208/02007 . . UDP-N-acetylgalactosamine-4-sulfate sulfotransferase (2.8.2.7) [N1204]
C12Y208/02008 . . [Heparan sulfate-glucosamine N-sulfotransferase (2.8.2.8) [N1204]
C12Y208/02009 . . Tyrosine-ester sulfotransferase (2.8.2.9) [N1204]
C12Y208/02010 . . Renilla-luciferin sulfotransferase (2.8.2.10) [N1204]
C12Y208/02011 . . Galactosylceramide sulfotransferase (2.8.2.11) [N1204]
C12Y208/02013 . . Psychosine sulfotransferase (2.8.2.13) [N1204]
C12Y208/02014 . . Bile-salt sulfotransferase (2.8.2.14) [N1204]
C12Y208/02015 . . Steroid sulfotransferase (2.8.2.15) [N1204]
C12Y208/02016 . . Thiol sulfotransferase (2.8.2.16) [N1204]
C12Y208/02017 . . Chondroitin 6-sulfotransferase (2.8.2.17) [N1204]
C12Y208/02018 . . Cortisol sulfotransferase (2.8.2.18) [N1204]
C12Y208/02019 . . Triglucosylalkylacylglycerol sulfotransferase (2.8.2.19) [N1204]
C12Y208/02020 . . Protein-tyrosine sulfotransferase (2.8.2.20) [N1202]
C12Y208/02021 . . Keratan sulfotransferase (2.8.2.21) [N1202]
C12Y208/02022 . . Aryl-sulfate sulfotransferase (2.8.2.22) [N1204]
C12Y208/02023 . . [Heparan sulfate-glucosamine 3-sulfotransferase 1 (2.8.2.23) [N1204]
C12Y208/02024 . . Desulfoglucosinolate sulfotransferase (2.8.2.24) [N1204]
C12Y208/02025 . . Flavonol 3-sulfotransferase (2.8.2.25) [N1204]
C12Y208/02026 . . Quercetin-3-sulfate 3'-sulfotransferase (2.8.2.26) [N1204]
C12Y208/02027 . . Quercetin-3-sulfate 4'-sulfotransferase (2.8.2.27) [N1204]
C12Y208/02028 . . Quercetin-3,3'-bissulfate 7-sulfotransferase (2.8.2.28) [N1204]
C12Y208/02029 . . [Heparan sulfate-glucosamine 3-sulfotransferase 2 (2.8.2.29) [N1204]
C12Y208/02030 . . [Heparan sulfate-glucosamine 3-sulfotransferase 3 (2.8.2.30) [N1204]

C12Y208/02031 . . Petromyzonol sulfotransferase (2.8.2.31) [N1204]
C12Y208/02032 . . Scymnol sulfotransferase (2.8.2.32) [N1204]
C12Y208/02033 . . N-Acetylgalactosamine 4-sulfate 6-O-sulfotransferase (2.8.2.33) [N1204]
C12Y208/02034 . . Glycochenodeoxycholate sulfotransferase (2.8.2.34) [N1204]
C12Y208/02035 . . Dermatan 4-sulfotransferase (2.8.2.35) [N1204]

C12Y208/03 . CoA-transferases (2.8.3) [N1202]
C12Y208/03001 . . Propionate CoA-transferase (2.8.3.1) [N1202]
C12Y208/03002 . . Oxalate CoA-transferase (2.8.3.2) [N1204]
C12Y208/03003 . . Malonate CoA-transferase (2.8.3.3) [N1204]
C12Y208/03005 . . 3-Oxoacid CoA-transferase (2.8.3.5) [N1204]
C12Y208/03006 . . 3-Oxoadipate CoA-transferase (2.8.3.6) [N1204]
C12Y208/03007 . . Succinate--citramalate CoA-transferase (2.8.3.7) [N1204]
C12Y208/03008 . . Acetate CoA-transferase (2.8.3.8) [N1204]
C12Y208/03009 . . Butyrate--acetoacetate CoA-transferase (2.8.3.9) [N1204]
C12Y208/03010 . . Citrate CoA-transferase (2.8.3.10) [N1204]
C12Y208/03011 . . Citramalate CoA-transferase (2.8.3.11) [N1204]
C12Y208/03012 . . Glutaconate CoA-transferase (2.8.3.12) [N1202]
C12Y208/03013 . . Succinate--hydroxymethylglutarate CoA-transferase (2.8.3.13) [N1204]
C12Y208/03014 . . 5-Hydroxypentanoate CoA-transferase (2.8.3.14) [N1204]
C12Y208/03015 . . Succinyl-CoA:(R)-benzylsuccinate CoA-transferase (2.8.3.15) [N1204]
C12Y208/03016 . . Formyl-CoA transferase (2.8.3.16) [N1204]
C12Y208/03017 . . Cinnamoyl-CoA:phenyllactate CoA-transferase (2.8.3.17) [N1204]

C12Y208/04 . transferring alkylthio groups (2.8.4) [N1204]
C12Y208/04001 . . Coenzyme-B sulfoethylthiotransferase (2.8.4.1) [N1204]
C12Y208/04002 . . Arsenate-mycothiol transferase (2.8.4.2) [N1204]

C12Y209/00 **Transferases transferring selenium-containing groups (2.9)** [N1202]

C12Y209/01 . transferring selenium-containing groups (2.9.1) [N1204]
C12Y209/01001 . . L-Seryl-tRNA(Sec) selenium transferase (2.9.1.1) [N1204]
C12Y209/01002 . . O-Phospho-L-seryl-tRNA(Sec):L-selenocysteinyl-tRNA synthase (2.9.1.2) [N1204]

C12Y210/00 **Transferases transferring molybdenum- or tungsten-containing groups (2.10)** [N1202]

C12Y210/01 . Molybdenumtransferases or tungstentransferases with sulfide groups as acceptors (2.10.1) [N1204]
C12Y210/01001 . . Molybdopterin molybdotransferase (2.10.1.1) [N1204]

C12Y301/00 **Hydrolases acting on ester bonds (3.1)** [N1202]

C12Y301/01 . Carboxylic ester hydrolases (3.1.1) [N1202]

C12Y301/01001 . . Carboxylesterase (3.1.1.1) [N1202]
C12Y301/01002 . . Arylesterase (3.1.1.2) [N1202]
C12Y301/01003 . . Triacylglycerol lipase (3.1.1.3) [N1202]
C12Y301/01004 . . Phospholipase A2 (3.1.1.4) [N1202]
C12Y301/01005 . . Lysophospholipase (3.1.1.5) [N1202]
C12Y301/01006 . . Acetylesterase (3.1.1.6) [N1202]
C12Y301/01007 . . Acetylcholinesterase (3.1.1.7) [N1202]
C12Y301/01008 . . Cholinesterase (3.1.1.8), i.e. butyrylcholine-esterase [N1202]
C12Y301/01010 . . Tropinesterase (3.1.1.10) [N1204]
C12Y301/01011 . . Pectinesterase (3.1.1.11) [N1202]
C12Y301/01013 . . Sterol esterase (3.1.1.13) [N1202]
C12Y301/01014 . . Chlorophyllase (3.1.1.14) [N1202]
C12Y301/01015 . . L-Arabinonolactonase (3.1.1.15) [N1204]
C12Y301/01016 . . 4-Carboxymethyl-4-hydroxyisocrotonolactonase (3.1.1.16) (C12Y301/01024, C12Y503/03004 take precedence) [N1204]
C12Y301/01017 . . Gluconolactonase (3.1.1.17) [N1202]
C12Y301/01019 . . Uronolactonase (3.1.1.19) [N1204]
C12Y301/01020 . . Tannase (3.1.1.20) [N1202]
C12Y301/01021 . . Retinyl-palmitate esterase (3.1.1.21) (C12Y301/01001, C12Y301/01003 take precedence) [N1204]
C12Y301/01022 . . Hydroxybutyrate-dimer hydrolase (3.1.1.22) [N1204]
C12Y301/01023 . . Acylglycerol lipase (3.1.1.23) [N1202]
C12Y301/01024 . . 3-Oxoadipate enol-lactonase (3.1.1.24) [N1204]
C12Y301/01025 . . 1,4-Lactonase (3.1.1.25) [N1202]
C12Y301/01026 . . Galactolipase (3.1.1.26) [N1202]
C12Y301/01027 . . 4-Pyridoxolactonase (3.1.1.27) [N1204]
C12Y301/01028 . . Acylcarnitine hydrolase (3.1.1.28) [N1204]
C12Y301/01029 . . Aminoacyl-tRNA hydrolase (3.1.1.29) [N1204]
C12Y301/01030 . . D-Arabinonolactonase (3.1.1.30) [N1204]
C12Y301/01031 . . 6-Phosphogluconolactonase (3.1.1.31) [N1202]
C12Y301/01032 . . Phospholipase A1 (3.1.1.32) [N1202]
C12Y301/01033 . . 6-Acetylglucose deacetylase (3.1.1.33) [N1204]
C12Y301/01034 . . Lipoprotein lipase (3.1.1.34) [N1202]
C12Y301/01035 . . Dihydrocoumarin hydrolase (3.1.1.35) [N1204]
C12Y301/01036 . . Limonin-D-ring-lactonase (3.1.1.36) [N1204]
C12Y301/01037 . . Steroid-lactonase (3.1.1.37) [N1204]
C12Y301/01038 . . Triacetate-lactonase (3.1.1.38) [N1204]
C12Y301/01039 . . Actinomycin lactonase (3.1.1.39) [N1204]
C12Y301/01040 . . Orsellinate-depside hydrolase (3.1.1.40) [N1204]
C12Y301/01041 . . Cephalosporin-C deacetylase (3.1.1.41) [N1204]
C12Y301/01042 . . Chlorogenate hydrolase (3.1.1.42) [N1204]
C12Y301/01043 . . Alpha-amino-acid esterase (3.1.1.43) [N1202]
C12Y301/01044 . . 4-Methyloxaloacetate esterase (3.1.1.44) [N1204]

C12Y301/01045 . . Carboxymethylenebutenolidase (3.1.1.45) [N1204]
C12Y301/01046 . . Deoxylimonate A-ring-lactonase (3.1.1.46) [N1204]
C12Y301/01047 . . 1-Alkyl-2-acetylglycerophosphocholine esterase (3.1.1.47), i.e. platelet-activating factor acetylhydrolase [N1202]
C12Y301/01048 . . Fusarinine-C ornithinesterase (3.1.1.48) [N1204]
C12Y301/01049 . . Sinapine esterase (3.1.1.49) [N1204]
C12Y301/01050 . . Wax-ester hydrolase (3.1.1.50) [N1204]
C12Y301/01051 . . Phorbol-diester hydrolase (3.1.1.51) [N1204]
C12Y301/01052 . . Phosphatidylinositol deacylase (3.1.1.52) [N1204]
C12Y301/01053 . . Sialate O-acetylesterase (3.1.1.53) [N1202]
C12Y301/01054 . . Acetoxybutynylbithiophene deacetylase (3.1.1.54) [N1204]
C12Y301/01055 . . Acetylsalicylate deacetylase (3.1.1.55) [N1204]
C12Y301/01056 . . Methylumbelliferyl-acetate deacetylase (3.1.1.56) [N1204]
C12Y301/01057 . . 2-Pyrone-4,6-dicarboxylate lactonase (3.1.1.57) [N1204]
C12Y301/01058 . . N-Acetylgalactosaminoglycan deacetylase (3.1.1.58) [N1204]
C12Y301/01059 . . Juvenile-hormone esterase (3.1.1.59) [N1202]
C12Y301/01060 . . Bis(2-ethylhexyl)phthalate esterase (3.1.1.60) [N1204]
C12Y301/01061 . . Protein-glutamate methylesterase (3.1.1.61) [N1204]
C12Y301/01063 . . 11-Cis-retinyl-palmitate hydrolase (3.1.1.63) [N1204]
C12Y301/01064 . . Retinoid isomerohydrolase (3.1.1.64) [N1204]
C12Y301/01065 . . L-Rhamnono-1,4-lactonase (3.1.1.65) [N1204]
C12Y301/01066 . . 5-(3,4-Diacetoxybut-1-ynyl)-2,2'-bithiophene deacetylase (3.1.1.66) [N1204]
C12Y301/01067 . . Fatty-acyl-ethyl-ester synthase (3.1.1.67) [N1204]
C12Y301/01068 . . Xylono-1,4-lactonase (3.1.1.68) [N1204]
C12Y301/01070 . . Cetraxate benzylesterase (3.1.1.70) [N1204]
C12Y301/01071 . . Acetylalkylglycerol acetylhydrolase (3.1.1.71) [N1204]
C12Y301/01072 . . Acetylxylan esterase (3.1.1.72) [N1202]
C12Y301/01073 . . Feruloyl esterase (3.1.1.73) [N1202]
C12Y301/01074 . . Cutinase (3.1.1.74) [N1202]
C12Y301/01075 . . Poly(3-hydroxybutyrate) depolymerase (3.1.1.75) [N1204]
C12Y301/01076 . . Poly(3-hydroxyoctanoate) depolymerase (3.1.1.76) [N1204]
C12Y301/01077 . . Acyloxyacyl hydrolase (3.1.1.77) [N1204]
C12Y301/01078 . . Polyneuridine-aldehyde esterase (3.1.1.78) [N1204]
C12Y301/01079 . . Hormone-sensitive lipase (3.1.1.79) [N1204]
C12Y301/01080 . . Acetylajmaline esterase (3.1.1.80) [N1204]
C12Y301/01081 . . Quorum-quenching N-acyl-homoserine lactonase (3.1.1.81) [N1204]
C12Y301/01082 . . Pheophorbidase (3.1.1.82) [N1204]
C12Y301/01083 . . Monoterpene epsilon-lactone hydrolase (3.1.1.83) [N1204]
C12Y301/01084 . . Cocaine esterase (3.1.1.84) [N1204]
C12Y301/01085 . . Pimelyl-[acyl-carrier protein methyl ester esterase (3.1.1.85) [N1204]
C12Y301/01086 . . Rhamnogalacturonan acetylesterase (3.1.1.86) [N1204]
C12Y301/01087 . . Fumonisin B1 esterase (3.1.1.87) [N1204]

C12Y301/01088 . . Pyrethroid hydrolase (3.1.1.88) [N1204]
C12Y301/01089 . . Protein phosphatase methylesterase-1 (3.1.1.89) [N1204]
C12Y301/01090 . . All-trans-retinyl ester 13-cis isomerohydrolase (3.1.1.90) [N1204]

C12Y301/02 . Thioester hydrolases (3.1.2) [N1202]
C12Y301/02001 . . Acetyl-CoA hydrolase (3.1.2.1) [N1202]
C12Y301/02002 . . Palmitoyl-CoA hydrolase (3.1.2.2) [N1204]
C12Y301/02003 . . Succinyl-CoA hydrolase (3.1.2.3) [N1204]
C12Y301/02004 . . 3-Hydroxyisobutyryl-CoA hydrolase (3.1.2.4) [N1204]
C12Y301/02005 . . Hydroxymethylglutaryl-CoA hydrolase (3.1.2.5) [N1204]
C12Y301/02006 . . Hydroxyacylglutathione hydrolase (3.1.2.6) [N1204]
C12Y301/02007 . . Glutathione thiolesterase (3.1.2.7) [N1204]
C12Y301/02010 . . Formyl-CoA hydrolase (3.1.2.10) [N1204]
C12Y301/02011 . . Acetoacetyl-CoA hydrolase (3.1.2.11) [N1204]
C12Y301/02012 . . S-Formylglutathione hydrolase (3.1.2.12) [N1204]
C12Y301/02013 . . S-Succinylglutathione hydrolase (3.1.2.13) [N1204]
C12Y301/02014 . . Oleoyl-[acyl-carrier-protein] hydrolase (3.1.2.14), i.e. ACP-thioesterase [N1202]
C12Y301/02015 . . Ubiquitin thiolesterase (3.1.2.15) [N1202]
C12Y301/02016 . . Citrate-lyase deacetylase (3.1.2.16) [N1204]
C12Y301/02017 . . (S)-Methylmalonyl-CoA hydrolase (3.1.2.17) [N1204]
C12Y301/02018 . . ADP-dependent short-chain-acyl-CoA hydrolase (3.1.2.18) [N1204]
C12Y301/02019 . . ADP-dependent medium-chain-acyl-CoA hydrolase (3.1.2.19) [N1204]
C12Y301/02020 . . Acyl-CoA hydrolase (3.1.2.20) [N1204]
C12Y301/02021 . . Dodecanoyl-[acyl-carrier-protein hydrolase (3.1.2.21) [N1204]
C12Y301/02022 . . Palmitoyl-protein hydrolase (3.1.2.22) [N1204]
C12Y301/02023 . . 4-Hydroxybenzoyl-CoA thioesterase (3.1.2.23) [N1204]
C12Y301/02025 . . Phenylacetyl-CoA hydrolase (3.1.2.25) [N1204]
C12Y301/02026 . . Bile-acid-CoA hydrolase (3.1.2.26) [N1204]
C12Y301/02027 . . Choloyl-CoA hydrolase (3.1.2.27) [N1204]
C12Y301/02028 . . 1,4-Dihydroxy-2-naphthoyl-CoA hydrolase (3.1.2.28) [N1204]
C12Y301/02029 . . Fluoroacetyl-CoA thioesterase (3.1.2.29) [N1204]

C12Y301/03 . Phosphoric monoester hydrolases (3.1.3) [N1202]
C12Y301/03001 . . Alkaline phosphatase (3.1.3.1) [N1202]
C12Y301/03002 . . Acid phosphatase (3.1.3.2) [N1202]
C12Y301/03003 . . Phosphoserine phosphatase (3.1.3.3) [N1202]
C12Y301/03004 . . Phosphatidate phosphatase (3.1.3.4) [N1202]
C12Y301/03005 . . 5'-Nucleotidase (3.1.3.5) [N1202]
C12Y301/03006 . . 3'-Nucleotidase (3.1.3.6) [N1202]
C12Y301/03007 . . 3'(2'),5'-Bisphosphate nucleotidase (3.1.3.7) [N1202]
C12Y301/03008 . . 3-Phytase (3.1.3.8) [N1202]
C12Y301/03009 . . Glucose-6-phosphatase (3.1.3.9) [N1202]
C12Y301/03010 . . Glucose-1-phosphatase (3.1.3.10) [N1202]

C12Y301/03011 . . Fructose-bisphosphatase (3.1.3.11) [N1202]
C12Y301/03012 . . Trehalose-phosphatase (3.1.3.12) [N1202]
C12Y301/03013 . . Bisphosphoglycerate phosphatase (3.1.3.13) [N1204]
C12Y301/03014 . . Methylphosphothioglycerate phosphatase (3.1.3.14) [N1204]
C12Y301/03015 . . Histidinol-phosphatase (3.1.3.15) [N1204]
C12Y301/03016 . . Phosphoprotein phosphatase (3.1.3.16), i.e. calcineurin [N1202]
C12Y301/03017 . . [Phosphorylase phosphatase (3.1.3.17) [N1204]
C12Y301/03018 . . Phosphoglycolate phosphatase (3.1.3.18) [N1204]
C12Y301/03019 . . Glycerol-2-phosphatase (3.1.3.19) [N1204]
C12Y301/03020 . . Phosphoglycerate phosphatase (3.1.3.20) [N1204]
C12Y301/03021 . . Glycerol-1-phosphatase (3.1.3.21) [N1204]
C12Y301/03022 . . Mannitol-1-phosphatase (3.1.3.22) [N1204]
C12Y301/03023 . . Sugar-phosphatase (3.1.3.23) [N1204]
C12Y301/03024 . . Sucrose-phosphate phosphatase (3.1.3.24) [N1204]
C12Y301/03025 . . Inositol-phosphate phosphatase (3.1.3.25) [N1204]
C12Y301/03026 . . 4-Phytase (3.1.3.26), i.e. 6-phytase [N1202]
C12Y301/03027 . . Phosphatidylglycerophosphatase (3.1.3.27) [N1204]
C12Y301/03028 . . ADP-phosphoglycerate phosphatase (3.1.3.28) [N1204]
C12Y301/03029 . . N-Acylneuraminate-9-phosphatase (3.1.3.29) [N1204]
C12Y301/03031 . . Nucleotidase (3.1.3.31) [N1204]
C12Y301/03032 . . Polynucleotide 3'-phosphatase (3.1.3.32) [N1204]
C12Y301/03033 . . Polynucleotide 5'-phosphatase (3.1.3.33) [N1204]
C12Y301/03034 . . Deoxynucleotide 3'-phosphatase (3.1.3.34) [N1204]
C12Y301/03035 . . Thymidylate 5'-phosphatase (3.1.3.35) [N1204]
C12Y301/03036 . . Phosphoinositide 5-phosphatase (3.1.3.36) [N1204]
C12Y301/03037 . . Sedoheptulose-bisphosphatase (3.1.3.37) [N1204]
C12Y301/03038 . . 3-Phosphoglycerate phosphatase (3.1.3.38) [N1204]
C12Y301/03039 . . Streptomycin-6-phosphatase (3.1.3.39) [N1204]
C12Y301/03040 . . Guanidinodeoxy-scyllo-inositol-4-phosphatase (3.1.3.40) [N1204]
C12Y301/03041 . . 4-Nitrophenylphosphatase (3.1.3.41) [N1202]
C12Y301/03042 . . [Glycogen-synthase-D phosphatase (3.1.3.42) [N1204]
C12Y301/03043 . . [Pyruvate dehydrogenase (acetyl-transferring)-phosphatase (3.1.3.43) [N1204]
C12Y301/03044 . . [Acetyl-CoA carboxylase-phosphatase (3.1.3.44) [N1204]
C12Y301/03045 . . 3-Deoxy-manno-octulosonate-8-phosphatase (3.1.3.45) [N1204]
C12Y301/03046 . . Fructose-2,6-bisphosphate 2-phosphatase (3.1.3.46) [N1204]
C12Y301/03047 . . [Hydroxymethylglutaryl-CoA reductase (NADPH)-phosphatase (3.1.3.47) [N1204]
C12Y301/03048 . . Protein-tyrosine-phosphatase (3.1.3.48) [N1202]
C12Y301/03049 . . [Pyruvate kinase-phosphatase (3.1.3.49) [N1204]
C12Y301/03050 . . Sorbitol-6-phosphatase (3.1.3.50) [N1204]
C12Y301/03051 . . Dolichyl-phosphatase (3.1.3.51) [N1204]
C12Y301/03052 . . [3-Methyl-2-oxobutanoate dehydrogenase (2-methylpropanoyl-transferring)-phosphatase (3.1.3.52) [N1204]

C12Y301/03053 . . [Myosin-light-chain phosphatase (3.1.3.53) [N1204]
C12Y301/03054 . . Fructose-2,6-bisphosphate 6-phosphatase (3.1.3.54) [N1204]
C12Y301/03055 . . Caldesmon-phosphatase (3.1.3.55) [N1204]
C12Y301/03056 . . Inositol-polyphosphate 5-phosphatase (3.1.3.56) [N1202]
C12Y301/03057 . . Inositol-1,4-bisphosphate 1-phosphatase (3.1.3.57) [N1204]
C12Y301/03058 . . Sugar-terminal-phosphatase (3.1.3.58) [N1204]
C12Y301/03059 . . Alkylacetylglycerophosphatase (3.1.3.59) [N1204]
C12Y301/03060 . . Phosphoenolpyruvate phosphatase (3.1.3.60) [N1204]
C12Y301/03062 . . Multiple inositol-polyphosphate phosphatase (3.1.3.62) [N1204]
C12Y301/03063 . . 2-Carboxy-D-arabinitol-1-phosphatase (3.1.3.63) [N1204]
C12Y301/03064 . . Phosphatidylinositol-3-phosphatase (3.1.3.64) [N1204]
C12Y301/03066 . . Phosphatidylinositol-3,4-bisphosphate 4-phosphatase (3.1.3.66) [N1204]
C12Y301/03067 . . Phosphatidylinositol-3,4,5-trisphosphate 3-phosphatase (3.1.3.67) [N1202]
C12Y301/03068 . . 2-Deoxyglucose-6-phosphatase (3.1.3.68) [N1204]
C12Y301/03069 . . Glucosylglycerol 3-phosphatase (3.1.3.69) [N1204]
C12Y301/03070 . . Mannosyl-3-phosphoglycerate phosphatase (3.1.3.70) [N1204]
C12Y301/03071 . . 2-Phosphosulfolactate phosphatase (3.1.3.71) [N1204]
C12Y301/03072 . . 5-Phytase (3.1.3.72) [N1204]
C12Y301/03073 . . Adenosylcobalamin/alpha-ribazole phosphatase (3.1.3.73) [N1204]
C12Y301/03074 . . Pyridoxal phosphatase (3.1.3.74) [N1204]
C12Y301/03075 . . Phosphoethanolamine/phosphocholine phosphatase (3.1.3.75) [N1204]
C12Y301/03076 . . Lipid-phosphate phosphatase (3.1.3.76) [N1204]
C12Y301/03077 . . Acireductone synthase (3.1.3.77) [N1204]
C12Y301/03078 . . Phosphatidylinositol-4,5-bisphosphate 4-phosphatase (3.1.3.78) [N1204]
C12Y301/03079 . . Mannosylfructose-phosphate phosphatase (3.1.3.79) [N1204]
C12Y301/03080 . . 2,3-Bisphosphoglycerate 3-phosphatase (3.1.3.80) [N1204]
C12Y301/03081 . . Diacylglycerol diphosphate phosphatase (3.1.3.81) [N1204]
C12Y301/03082 . . D-Glycero-beta-D-manno-heptose 1,7-bisphosphate 7-phosphatase (3.1.3.82) [N1204]
C12Y301/03083 . . D-Glycero-alpha-D-manno-heptose-1,7-bisphosphate 7-phosphatase (3.1.3.83) [N1204]
C12Y301/03084 . . ADP-ribose 1''-phosphate phosphatase (3.1.3.84) [N1204]
C12Y301/03085 . . Glucosyl-3-phosphoglycerate phosphatase (3.1.3.85) [N1204]
C12Y301/03086 . . Phosphatidylinositol-3,4,5-trisphosphate 5-phosphatase (3.1.3.86) [N1204]

C12Y301/04 . Phosphoric diester hydrolases (3.1.4) [N1202]
C12Y301/04001 . . Phosphodiesterase I (3.1.4.1) [N1202]
C12Y301/04002 . . Glycerophosphocholine phosphodiesterase (3.1.4.2) [N1204]
C12Y301/04003 . . Phospholipase C (3.1.4.3) [N1202]
C12Y301/04004 . . Phospholipase D (3.1.4.4) [N1202]
C12Y301/04011 . . Phosphoinositide phospholipase C (3.1.4.11) [N1202]
C12Y301/04012 . . Sphingomyelin phosphodiesterase (3.1.4.12) [N1202]
C12Y301/04013 . . Serine-ethanolaminephosphate phosphodiesterase (3.1.4.13) [N1204]

C12Y301/04014 . . [Acyl-carrier-protein phosphodiesterase (3.1.4.14) [N1204]
C12Y301/04015 . . Adenylyl-[glutamate--ammonia ligase hydrolase (3.1.4.15) [N1204]
C12Y301/04016 . . 2',3'-Cyclic-nucleotide 2'-phosphodiesterase (3.1.4.16) [N1204]
C12Y301/04017 . . 3',5'-Cyclic-nucleotide phosphodiesterase (3.1.4.17) [N1202]
C12Y301/04035 . . 3',5'-Cyclic-GMP phosphodiesterase (3.1.4.35) [N1202]
C12Y301/04037 . . 2',3'-Cyclic-nucleotide 3'-phosphodiesterase (3.1.4.37) [N1204]
C12Y301/04038 . . Glycerophosphocholine cholinephosphodiesterase (3.1.4.38) [N1204]
C12Y301/04039 . . Alkylglycerophosphoethanolamine phosphodiesterase (3.1.4.39) [N1202]
C12Y301/04040 . . CMP-N-acylneuraminate phosphodiesterase (3.1.4.40) [N1204]
C12Y301/04041 . . Sphingomyelin phosphodiesterase D (3.1.4.41) [N1204]
C12Y301/04042 . . Glycerol-1,2-cyclic-phosphate 2-phosphodiesterase (3.1.4.42) [N1204]
C12Y301/04043 . . Glycerophosphoinositol inositolphosphodiesterase (3.1.4.43) [N1204]
C12Y301/04044 . . Glycerophosphoinositol glycerophosphodiesterase (3.1.4.44) [N1204]
C12Y301/04045 . . N-Acetylglucosamine-1-phosphodiester alpha-N-acetylglucosaminidase (3.1.4.45) [N1202]
C12Y301/04046 . . Glycerophosphodiester phosphodiesterase (3.1.4.46) [N1204]
C12Y301/04048 . . Dolichylphosphate-glucose phosphodiesterase (3.1.4.48) [N1204]
C12Y301/04049 . . Dolichylphosphate-mannose phosphodiesterase (3.1.4.49) [N1204]
C12Y301/04050 . . Glycosylphosphatidylinositol phospholipase D (3.1.4.50) [N1204]
C12Y301/04051 . . Glucose-1-phospho-D-mannosylglycoprotein phosphodiesterase (3.1.4.51) [N1204]
C12Y301/04052 . . Cyclic-guanylate-specific phosphodiesterase (3.1.4.52) [N1204]
C12Y301/04053 . . 3',5'-Cyclic-AMP phosphodiesterase (3.1.4.53) [N1204]
C12Y301/04054 . . N-Acetylphosphatidylethanolamine-hydrolyzing phospholipase D (3.1.4.54) [N1204]

C12Y301/05 . Triphosphoric monoester hydrolases (3.1.5) [N1202]
C12Y301/05001 . . dGTPase (3.1.5.1) [N1202]

C12Y301/06 . Sulfuric ester hydrolases (3.1.6) [N1202]
C12Y301/06001 . . Arylsulfatase (3.1.6.1) [N1202]
C12Y301/06002 . . Steryl-sulfatase (3.1.6.2) [N1202]
C12Y301/06003 . . Glycosulfatase (3.1.6.3) [N1204]
C12Y301/06004 . . N-Acetylgalactosamine-6-sulfatase (3.1.6.4) [N1204]
C12Y301/06006 . . Choline-sulfatase (3.1.6.6) [N1204]
C12Y301/06007 . . Cellulose-polysulfatase (3.1.6.7) [N1204]
C12Y301/06008 . . Cerebroside-sulfatase (3.1.6.8) [N1202]
C12Y301/06009 . . Chondro-4-sulfatase (3.1.6.9) [N1204]
C12Y301/06010 . . Chondro-6-sulfatase (3.1.6.10) [N1204]
C12Y301/06011 . . Disulfoglucosamine-6-sulfatase (3.1.6.11) [N1204]
C12Y301/06012 . . N-Acetylgalactosamine-4-sulfatase (3.1.6.12) [N1202]
C12Y301/06013 . . Iduronate-2-sulfatase (3.1.6.13) [N1204]
C12Y301/06014 . . N-Acetylglucosamine-6-sulfatase (3.1.6.14) [N1202]
C12Y301/06015 . . N-Sulfoglucosamine-3-sulfatase (3.1.6.15) [N1204]
C12Y301/06016 . . Monomethyl-sulfatase (3.1.6.16) [N1204]

C12Y301/06017 . . D-Lactate-2-sulfatase (3.1.6.17) [N1204]
C12Y301/06018 . . Glucuronate-2-sulfatase (3.1.6.18) [N1204]

C12Y301/07 . Diphosphoric monoester hydrolases (3.1.7) [N1202]
C12Y301/07001 . . Prenyl-diphosphatase (3.1.7.1) [N1204]
C12Y301/07002 . . Guanosine-3',5'-bis(diphosphate) 3'-diphosphatase (3.1.7.2) [N1204]
C12Y301/07003 . . Monoterpenyl-diphosphatase (3.1.7.3) [N1204]
C12Y301/07004 . . Sclareol cyclase (3.1.7.4) [N1202]
C12Y301/07005 . . Geranylgeranyl diphosphate diphosphatase (3.1.7.5) [N1204]
C12Y301/07006 . . Farnesyl diphosphatase (3.1.7.6) [N1204]
C12Y301/07007 . . Drimenol cyclase (3.1.7.7) [N1204]
C12Y301/07008 . . Tuberculosinol synthase (3.1.7.8) [N1204]
C12Y301/07009 . . Isotuberculosinol synthase (3.1.7.9) [N1204]

C12Y301/08 . Phosphoric triester hydrolases (3.1.8) [N1202]
C12Y301/08001 . . Aryldialkylphosphatase (3.1.8.1), i.e. paraoxonase [N1202]
C12Y301/08002 . . Diisopropyl-fluorophosphatase (3.1.8.2) [N1204]

C12Y301/11 . Exodeoxyribonucleases producing 5'-phosphomonoesters (3.1.11) [N1202]
C12Y301/11001 . . Exodeoxyribonuclease I (3.1.11.1) [N1204]
C12Y301/11002 . . Exodeoxyribonuclease III (3.1.11.2) [N1202]
C12Y301/11003 . . Exodeoxyribonuclease (lambda-induced) (3.1.11.3) [N1204]
C12Y301/11004 . . Exodeoxyribonuclease (phage SP3-induced) (3.1.11.4) [N1204]
C12Y301/11005 . . Exodeoxyribonuclease V (3.1.11.5) [N1204]
C12Y301/11006 . . Exodeoxyribonuclease VII (3.1.11.6) [N1204]

C12Y301/13 . Exoribonucleases producing 5'-phosphomonoesters (3.1.13) [N1204]
C12Y301/13001 . . Exoribonuclease II (3.1.13.1) [N1204]
C12Y301/13002 . . Exoribonuclease H (3.1.13.2) [N1204]
C12Y301/13003 . . Oligonucleotidase (3.1.13.3) [N1204]
C12Y301/13004 . . Poly(A)-specific ribonuclease (3.1.13.4) [N1204]
C12Y301/13005 . . Ribonuclease D (3.1.13.5) [N1204]

C12Y301/14 . Exoribonucleases producing 3'-phosphomonoesters (3.1.14) [N1204]
C12Y301/14001 . . Yeast ribonuclease (3.1.14.1) [N1204]

C12Y301/15 . Exonucleases active with either ribo- or deoxyribonucleic acids and producing 5'-phosphomonoesters (3.1.15) [N1204]
C12Y301/15001 . . Venom exonuclease (3.1.15.1) [N1204]

C12Y301/16 . Exonucleases active with either ribo- or deoxyribonucleic acids and producing 3'-phosphomonoesters (3.16) [N1202]
C12Y301/16001 . . Spleen exonuclease (3.1.16.1), i.e. 5->3 exoribonuclease [N1202]

C12Y301/21 . Endodeoxyribonucleases producing 5'-phosphomonoesters (3.1.21) [N1202]
C12Y301/21001 . . Deoxyribonuclease I (3.1.21.1) [N1202]

C12Y301/21002 . . Deoxyribonuclease IV (phage-T(4)-induced) (3.1.21.2) [N1204]
C12Y301/21003 . . Type I site-specific deoxyribonuclease (3.1.21.3) [N1204]
C12Y301/21004 . . Type II site-specific deoxyribonuclease (3.1.21.4) [N1204]
C12Y301/21005 . . Type III site-specific deoxyribonuclease (3.1.21.5) [N1204]
C12Y301/21006 . . CC-preferring endodeoxyribonuclease (3.1.21.6) [N1204]
C12Y301/21007 . . Deoxyribonuclease V (3.1.21.7) [N1204]

C12Y301/22 . Endodeoxyribonucleases producing 3'-phosphomonoesters (3.1.22) [N1202]
C12Y301/22001 . . Deoxyribonuclease II (3.1.22.1) [N1202]
C12Y301/22002 . . Aspergillus deoxyribonuclease K(1) (3.1.22.2) [N1204]
C12Y301/22004 . . Crossover junction endodeoxyribonuclease (3.1.22.4) [N1204]
C12Y301/22005 . . Deoxyribonuclease X (3.1.22.5) [N1204]

C12Y301/25 . Site-specific endodeoxyribonucleases specific for altered bases (3.1.25) [N1202]
C12Y301/25001 . . Deoxyribonuclease (pyrimidine dimer) (3.1.25.1) [N1202]

C12Y301/26 . Endoribonucleases producing 5'-phosphomonoesters (3.1.26) [N1202]
C12Y301/26001 . . Physarum polycephalum ribonuclease (3.1.26.1) [N1204]
C12Y301/26002 . . Ribonuclease alpha (3.1.26.2) [N1204]
C12Y301/26003 . . Ribonuclease III (3.1.26.3) [N1202]
C12Y301/26004 . . Ribonuclease H (3.1.26.4) [N1202]
C12Y301/26005 . . Ribonuclease P (3.1.26.5) [N1204]
C12Y301/26006 . . Ribonuclease IV (3.1.26.6) [N1202]
C12Y301/26007 . . Ribonuclease P4 (3.1.26.7) [N1204]
C12Y301/26008 . . Ribonuclease M5 (3.1.26.8) [N1204]
C12Y301/26009 . . Ribonuclease (poly-(U)-specific) (3.1.26.9) [N1204]
C12Y301/26010 . . Ribonuclease IX (3.1.26.10) [N1204]
C12Y301/26011 . . tRNase Z (3.1.26.11) [N1204]
C12Y301/26012 . . Ribonuclease E (3.1.26.12) [N1204]
C12Y301/26013 . . Retroviral ribonuclease H (3.1.26.13) [N1204]

C12Y301/27 . Endoribonucleases producing 3'-phosphomonoesters (3.1.27) [N1202]
C12Y301/27001 . . Ribonuclease T2 (3.1.27.1) [N1204]
C12Y301/27002 . . Bacillus subtilis ribonuclease (3.1.27.2) [N1204]
C12Y301/27003 . . Ribonuclease T1 (3.1.27.3) [N1204]
C12Y301/27004 . . Ribonuclease U2 (3.1.27.4) [N1204]
C12Y301/27005 . . Pancreatic ribonuclease (3.1.27.5) [N1202]
C12Y301/27006 . . Enterobacter ribonuclease (3.1.27.6) [N1204]
C12Y301/27007 . . Ribonuclease F (3.1.27.7) [N1204]
C12Y301/27008 . . Ribonuclease V (3.1.27.8) [N1204]
C12Y301/27009 . . tRNA-intron endonuclease (3.1.27.9) [N1202]
C12Y301/27010 . . rRNA endonuclease (3.1.27.10) [N1204]

C12Y301/30 . Endoribonucleases active with either ribo- or deoxyribonucleic acids and producing 5'-phosphomonoesters (3.1.30) [N1202]

C12Y301/30001 . . Aspergillus nuclease S1 (3.1.30.1) [N1202]
C12Y301/30002 . . Serratia marcescens nuclease (3.1.30.2) [N1204]

C12Y301/31 . Endoribonucleases active with either ribo- or deoxyribonucleic acids and producing 3'-phosphomonoesters (3.1.31) [N1204]
C12Y301/31001 . . Micrococcal nuclease (3.1.31.1) [N1204]

C12Y302/00 Hydrolases acting on glycosyl compounds, i.e. glycosylases (3.2) [N1202]

C12Y302/01 . Glycosidases, i.e. enzymes hydrolysing O- and S-glycosyl compounds (3.2.1) [N1202]
C12Y302/01001 . . Alpha-amylase (3.2.1.1) [N1202]
C12Y302/01002 . . Beta-amylase (3.2.1.2) [N1202]
C12Y302/01003 . . Glucan 1,4-alpha-glucosidase (3.2.1.3), i.e. glucoamylase [N1202]
C12Y302/01004 . . Cellulase (3.2.1.4), i.e. endo-1,4-beta-glucanase [N1202]
C12Y302/01006 . . Endo-1,3(4)-beta-glucanase (3.2.1.6) [N1202]
C12Y302/01007 . . Inulinase (3.2.1.7) [N1202]
C12Y302/01008 . . Endo-1,4-beta-xylanase (3.2.1.8) [N1202]
C12Y302/01010 . . Oligo-1,6-glucosidase (3.2.1.10), i.e. sucrase [N1202]
C12Y302/01011 . . Dextranase (3.2.1.11) [N1202]
C12Y302/01014 . . Chitinase (3.2.1.14) [N1202]
C12Y302/01015 . . Polygalacturonase (3.2.1.15) [N1202]
C12Y302/01017 . . Lysozyme (3.2.1.17) [N1202]
C12Y302/01018 . . Exo-alpha-sialidase (3.2.1.18), i.e. trans-sialidase [N1202]
C12Y302/01019 . . Heparinase (3.2.1.19) [N1202]
C12Y302/01020 . . Alpha-glucosidase (3.2.1.20) [N1202]
C12Y302/01021 . . Beta-glucosidase (3.2.1.21) [N1202]
C12Y302/01022 . . Alpha-galactosidase (3.2.1.22) [N1202]
C12Y302/01023 . . Beta-galactosidase (3.2.1.23), i.e. exo-(1-->4)-beta-D-galactanase [N1202]
C12Y302/01024 . . Alpha-mannosidase (3.2.1.24) [N1202]
C12Y302/01025 . . Beta-mannosidase (3.2.1.25), i.e. mannanase [N1202]
C12Y302/01026 . . Beta-fructofuranosidase (3.2.1.26), i.e. invertase [N1202]
C12Y302/01028 . . Alpha,alpha-trehalase (3.2.1.28) [N1202]
C12Y302/01031 . . Beta-glucuronidase (3.2.1.31) [N1202]
C12Y302/01032 . . Xylan endo-1,3-beta-xylosidase (3.2.1.32), i.e. endo-1-3-beta-xylanase [N1202]
C12Y302/01033 . . Amylo-alpha-1,6-glucosidase (3.2.1.33) [N1202]
C12Y302/01035 . . Hyaluronoglucosaminidase (3.2.1.35), i.e. hyaluronidase [N1202]
C12Y302/01036 . . Hyaluronoglucuronidase (3.2.1.36) [N1202]
C12Y302/01037 . . Xylan 1,4-beta-xylosidase (3.2.1.37) [N1202]
C12Y302/01038 . . Beta-D-fucosidase (3.2.1.38) [N1204]
C12Y302/01039 . . Glucan endo-1,3-beta-D-glucosidase (3.2.1.39) [N1202]
C12Y302/01040 . . Alpha-L-rhamnosidase (3.2.1.40) [N1202]
C12Y302/01041 . . Pullulanase (3.2.1.41) [N1202]
C12Y302/01042 . . GDP-glucosidase (3.2.1.42) [N1204]

C12Y302/01043 . . Beta-L-rhamnosidase (3.2.1.43) [N1204]
C12Y302/01044 . . Fucoidanase (3.2.1.44) [N1202]
C12Y302/01045 . . Glucosylceramidase (3.2.1.45), i.e. beta-glucocerebrosidase [N1202]
C12Y302/01046 . . Galactosylceramidase (3.2.1.46) [N1202]
C12Y302/01047 . . Galactosylgalactosylglucosylceramidase (3.2.1.47) [N1204]
C12Y302/01048 . . Sucrose alpha-glucosidase (3.2.1.48), i.e. sucrase [N1202]
C12Y302/01049 . . Alpha-N-acetylgalactosaminidase (3.2.1.49) [N1202]
C12Y302/01050 . . Alpha-N-acetylglucosaminidase (3.2.1.50) [N1202]
C12Y302/01051 . . Alpha-L-fucosidase (3.2.1.51) [N1202]
C12Y302/01052 . . Beta-N-acetylhexosaminidase (3.2.1.52) [N1202]
C12Y302/01053 . . Beta-N-acetylgalactosaminidase (3.2.1.53) [N1204]
C12Y302/01054 . . Cyclomaltodextrinase (3.2.1.54), i.e. cyclodextrinase [N1202]
C12Y302/01055 . . Alpha-N-arabinofuranosidase (3.2.1.55) [N1202]
C12Y302/01056 . . Glucuronosyl-disulfoglucosamine glucuronidase (3.2.1.56), i.e. glycuronidase [N1202]
C12Y302/01057 . . Isopullulanase (3.2.1.57) [N1204]
C12Y302/01058 . . Glucan 1,3-beta-glucosidase (3.2.1.58) [N1202]
C12Y302/01059 . . Glucan endo-1,3-alpha-glucosidase (3.2.1.59) [N1202]
C12Y302/01060 . . Glucan 1,4-alpha-maltotetraohydrolase (3.2.1.60) [N1202]
C12Y302/01061 . . Mycodextranase (3.2.1.61) [N1204]
C12Y302/01062 . . Glycosylceramidase (3.2.1.62) [N1202]
C12Y302/01063 . . 1,2-Alpha-L-fucosidase (3.2.1.63) [N1204]
C12Y302/01064 . . 2,6-Beta-fructan 6-levanbiohydrolase (3.2.1.64) [N1202]
C12Y302/01065 . . Levanase (3.2.1.65) [N1202]
C12Y302/01066 . . Quercitrinase (3.2.1.66) [N1204]
C12Y302/01067 . . Galacturan 1,4-alpha-galacturonidase (3.2.1.67) [N1202]
C12Y302/01068 . . Isoamylase (3.2.1.68) [N1202]
C12Y302/01070 . . Glucan 1,6-alpha-glucosidase (3.2.1.70) [N1204]
C12Y302/01071 . . Glucan endo-1,2-beta-glucosidase (3.2.1.71) [N1202]
C12Y302/01072 . . Xylan 1,3-beta-xylosidase (3.2.1.72) [N1202]
C12Y302/01073 . . Licheninase (3.2.1.73) [N1202]
C12Y302/01074 . . Glucan 1,4-beta-glucosidase (3.2.1.74) [N1202]
C12Y302/01075 . . Glucan endo-1,6-beta-glucosidase (3.2.1.75) [N1202]
C12Y302/01076 . . L-Iduronidase (3.2.1.76) [N1202]
C12Y302/01077 . . Mannan 1,2-(1,3)-alpha-mannosidase (3.2.1.77) [N1204]
C12Y302/01078 . . Mannan endo-1,4-beta-mannosidase (3.2.1.78), i.e. endo-beta-mannanase [N1202]
C12Y302/01080 . . Fructan beta-fructosidase (3.2.1.80) [N1202]
C12Y302/01081 . . Beta-agarase (3.2.1.81) [N1202]
C12Y302/01082 . . Exo-poly-alpha-galacturonosidase (3.2.1.82) [N1202]
C12Y302/01083 . . Kappa-carrageenase (3.2.1.83) [N1202]
C12Y302/01084 . . Glucan 1,3-alpha-glucosidase (3.2.1.84), i.e. mutanase [N1202]
C12Y302/01085 . . 6-Phospho-beta-galactosidase (3.2.1.85) [N1204]

C12Y302/01086 . . 6-Phospho-beta-glucosidase (3.2.1.86) [N1202]
C12Y302/01087 . . Capsular-polysaccharide endo-1,3-alpha-galactosidase (3.2.1.87) [N1204]
C12Y302/01088 . . Beta-L-arabinosidase (3.2.1.88) [N1202]
C12Y302/01089 . . Arabinogalactan endo-1,4-beta-galactosidase (3.2.1.89), i.e. endo-1,4-galactanase [N1202]
C12Y302/01091 . . Cellulose 1,4-beta-cellobiosidase (3.2.1.91) [N1202]
C12Y302/01092 . . Peptidoglycan beta-N-acetylmuramidase (3.2.1.92 [N1202]
C12Y302/01093 . . Alpha,alpha-phosphotrehalase (3.2.1.93) [N1204]
C12Y302/01094 . . Glucan 1,6-alpha-isomaltosidase (3.2.1.94) [N1204]
C12Y302/01095 . . Dextran 1,6-alpha-isomaltotriosidase (3.2.1.95) [N1204]
C12Y302/01096 . . Mannosyl-glycoprotein endo-beta-N-acetylglucosaminidase (3.2.1.96) [N1202]
C12Y302/01097 . . Glycopeptide alpha-N-acetylgalactosaminidase (3.2.1.97) [N1202]
C12Y302/01098 . . Glucan 1,4-alpha-maltohexaosidase (3.2.1.98) [N1202]
C12Y302/01099 . . Arabinan endo-1,5-alpha-L-arabinosidase (3.2.1.99) [N1202]
C12Y302/01100 . . Mannan 1,4-mannobiosidase (3.2.1.100) [N1202]
C12Y302/01101 . . Mannan endo-1,6-alpha-mannosidase (3.2.1.101), i.e. endo-1,6-beta-mannanase [N1202]
C12Y302/01102 . . Blood-group-substance endo-1,4-beta-galactosidase (3.2.1.102) [N1204]
C12Y302/01103 . . Keratan-sulfate endo-1,4-beta-galactosidase (3.2.1.103) [N1202]
C12Y302/01104 . . Steryl-beta-glucosidase (3.2.1.104) [N1204]
C12Y302/01105 . . 3-Alpha-(S)-strictosidine beta-glucosidase (3.2.1.105) [N1204]
C12Y302/01106 . . Mannosyl-oligosaccharide glucosidase (3.2.1.106), i.e. glucosidase I [N1202]
C12Y302/01107 . . Protein-glucosylgalactosylhydroxylysine glucosidase (3.2.1.107) [N1204]
C12Y302/01108 . . Lactase (3.2.1.108) [N1202]
C12Y302/01109 . . Endogalactosaminidase (3.2.1.109) [N1204]
C12Y302/01111 . . 1,3-Alpha-L-fucosidase (3.2.1.111), i.e. 1,3-alpha-fucosidase [N1202]
C12Y302/01112 . . 2-Deoxyglucosidase (3.2.1.112) [N1204]
C12Y302/01113 . . Mannosyl-oligosaccharide 1,2-alpha-mannosidase (3.2.1.113), i.e. alpha-1,2-mannosidase [N1202]
C12Y302/01114 . . Mannosyl-oligosaccharide 1,3-1,6-alpha-mannosidase (3.2.1.114) [N1202]
C12Y302/01115 . . Branched-dextran exo-1,2-alpha-glucosidase (3.2.1.115) [N1204]
C12Y302/01116 . . Glucan 1,4-alpha-maltotriohydrolase (3.2.1.116) [N1204]
C12Y302/01117 . . Amygdalin beta-glucosidase (3.2.1.117) [N1204]
C12Y302/01118 . . Prunasin beta-glucosidase (3.2.1.118), i.e. prunasin hydrolase [N1202]
C12Y302/01119 . . Vicianin beta-glucosidase (3.2.1.119) [N1204]
C12Y302/01120 . . Oligoxyloglucan beta-glycosidase (3.2.1.120) [N1202]
C12Y302/01121 . . Polymannuronate hydrolase (3.2.1.121) [N1204]
C12Y302/01122 . . Maltose-6'-phosphate glucosidase (3.2.1.122) [N1204]
C12Y302/01123 . . Endoglycosylceramidase (3.2.1.123) [N1202]
C12Y302/01124 . . 3-Deoxy-2-octulosonidase (3.2.1.124) [N1204]
C12Y302/01125 . . Raucaffricine beta-glucosidase (3.2.1.125) [N1204]
C12Y302/01126 . . Coniferin beta-glucosidase (3.2.1.126) [N1204]
C12Y302/01127 . . 1,6-alpha-L-fucosidase (3.2.1.127) [N1204]

C12Y302/01128 . . Glycyrrhizinate beta-glucuronidase (3.2.1.128), i.e. GL beta-D-glucoronidase [N1202]
C12Y302/01129 . . Endo-alpha-sialidase (3.2.1.129) [N1202]
C12Y302/01130 . . Glycoprotein endo-alpha-1,2-mannosidase (3.2.1.130) [N1202]
C12Y302/01131 . . Xylan alpha-1,2-glucuronosidase (3.2.1.131) [N1202]
C12Y302/01132 . . Chitosanase (3.2.1.132) [N1202]
C12Y302/01133 . . Glucan 1,4-alpha-maltohydrolase (3.2.1.133), i.e. maltogenic alpha-amylase [N1202]
C12Y302/01134 . . Difructose-anhydride synthase (3.2.1.134) [N1202]
C12Y302/01135 . . Neopullulanase (3.2.1.135) [N1202]
C12Y302/01136 . . Glucuronoarabinoxylan endo-1,4-beta-xylanase (3.2.1.136), i.e. feraxanase or feraxan-endoxylanase [N1202]
C12Y302/01137 . . Mannan exo-1,2-1,6-alpha-mannosidase (3.2.1.137) [N1204]
C12Y302/01139 . . Alpha-glucuronidase (3.2.1.139) [N1202]
C12Y302/01140 . . Lacto-N-biosidase (3.2.1.140) [N1202]
C12Y302/01141 . . 4-Alpha-D-{(1->4)-alpha-D-glucano} trehalose trehalohydrolase (3.2.1.141) [N1202]
C12Y302/01142 . . Limit dextrinase (3.2.1.142) [N1202]
C12Y302/01143 . . Poly(ADP-ribose) glycohydrolase (3.2.1.143) [N1202]
C12Y302/01144 . . 3-Deoxyoctulosonase (3.2.1.144) [N1204]
C12Y302/01145 . . Galactan 1,3-beta-galactosidase (3.2.1.145), i.e. arabinogalactan endo-1,3-beta-galactosidase [N1202]
C12Y302/01146 . . Beta-galactofuranosidase (3.2.1.146) [N1204]
C12Y302/01147 . . Thioglucosidase (3.2.1.147), i.e. myrosinase [N1202]
C12Y302/01149 . . Beta-primeverosidase (3.2.1.149) [N1202]
C12Y302/01150 . . Oligoxyloglucan reducing-end-specific cellobiohydrolase (3.2.1.150) [N1202]
C12Y302/01151 . . Xyloglucan-specific endo-beta-1,4-glucanase (3.2.1.151), i.e. endoxyloglucanase [N1202]
C12Y302/01152 . . Mannosylglycoprotein endo-beta-mannosidase (3.2.1.152) [N1204]
C12Y302/01153 . . Fructan beta-(2,1)-fructosidase (3.2.1.153) [N1204]
C12Y302/01154 . . Fructan beta-(2,6)-fructosidase (3.2.1.154) [N1204]
C12Y302/01155 . . Xyloglucan-specific exo-beta-1,4-glucanase (3.2.1.155), i.e. exoxyloglucanase [N1202]
C12Y302/01156 . . Oligosaccharide reducing-end xylanase (3.2.1.156) [N1202]
C12Y302/01157 . . Iota-carrageenase (3.2.1.157) [N1202]
C12Y302/01158 . . Alpha-agarase (3.2.1.158) [N1202]
C12Y302/01159 . . Alpha-neoagaro-oligosaccharide hydrolase (3.2.1.159) [N1204]
C12Y302/01161 . . Beta-apiosyl-beta-glucosidase (3.2.1.161) [N1204]
C12Y302/01162 . . Lambda-carrageenase (3.2.1.162) [N1202]
C12Y302/01163 . . 1,6-Alpha-D-mannosidase (3.2.1.163) [N1204]
C12Y302/01164 . . Galactan endo-1,6-beta-galactosidase (3.2.1.164) [N1202]
C12Y302/01165 . . Exo-1,4-beta-D-glucosaminidase (3.2.1.165), i.e. exochitosanase [N1202]
C12Y302/01166 . . Heparanase (3.2.1.166) [N1202]
C12Y302/01167 . . Baicalin-beta-D-glucuronidase (3.2.1.167) [N1204]
C12Y302/01168 . . Hesperidin 6-O-alpha-L-rhamnosyl-beta-D-glucosidase (3.2.1.168) [N1204]

C12Y302/01169 . . Protein O-GlcNAcase (3.2.1.169) [N1202]
C12Y302/01170 . . Mannosylglycerate hydrolase (3.2.1.170) [N1204]
C12Y302/01171 . . Rhamnogalacturonan hydrolase (3.2.1.171), i.e. rhamnogalacturonase [N1202]
C12Y302/01172 . . Unsaturated rhamnogalacturonyl hydrolase (3.2.1.172) [N1204]
C12Y302/01173 . . Rhamnogalacturonan galacturonohydrolase (3.2.1.173) [N1202]
C12Y302/01174 . . Rhamnogalacturonan rhamnohydrolase (3.2.1.174) [N1202]
C12Y302/01175 . . Beta-D-glucopyranosyl abscisate beta-glucosidase (3.2.1.175) [N1204]
C12Y302/01176 . . Cellulose 1,4-beta-cellobiosidase (reducing end) (3.2.1.176) [N1204]
C12Y302/01177 . . Alpha-D-xyloside xylohydrolase (3.2.1.177) [N1204]
C12Y302/01178 . . Beta-porphyranase (3.2.1.178) [N1204]
C12Y302/01179 . . Gellan tetrasaccharide unsaturated glucuronyl hydrolase (3.2.1.179) [N1204]
C12Y302/01180 . . Unsaturated chondroitin disaccharide hydrolase (3.2.1.180) [N1204]

C12Y302/02 . hydrolysing N-glycosyl compounds (3.2.2) [N1202]
C12Y302/02001 . . Purine nucleosidase (3.2.2.1) [N1202]
C12Y302/02002 . . Inosine nucleosidase (3.2.2.2) [N1202]
C12Y302/02003 . . Uridine nucleosidase (3.2.2.3) [N1202]
C12Y302/02004 . . AMP nucleosidase (3.2.2.4) [N1204]
C12Y302/02005 . . NAD+ nucleosidase (3.2.2.5) [N1202]
C12Y302/02006 . . NAD(P)+ nucleosidase (3.2.2.6) [N1204]
C12Y302/02007 . . Adenosine nucleosidase (3.2.2.7) [N1202]
C12Y302/02008 . . Ribosylpyrimidine nucleosidase (3.2.2.8) [N1202]
C12Y302/02009 . . Adenosylhomocysteine nucleosidase (3.2.2.9) [N1204]
C12Y302/02010 . . Pyrimidine-5'-nucleotide nucleosidase (3.2.2.10) [N1204]
C12Y302/02011 . . Beta-aspartyl-N-acetylglucosaminidase (3.2.2.11) [N1204]
C12Y302/02012 . . Inosinate nucleosidase (3.2.2.12) [N1204]
C12Y302/02013 . . 1-Methyladenosine nucleosidase (3.2.2.13) [N1202]
C12Y302/02014 . . NMN nucleosidase (3.2.2.14) [N1204]
C12Y302/02015 . . DNA-deoxyinosine glycosylase (3.2.2.15) [N1204]
C12Y302/02016 . . Methylthioadenosine nucleosidase (3.2.2.16) [N1204]
C12Y302/02017 . . Deoxyribodipyrimidine endonucleosidase (3.2.2.17) [N1202]
C12Y302/02019 . . Protein ADP-ribosylarginine hydrolase (3.2.2.19) [N1202]
C12Y302/02020 . . DNA-3-methyladenine glycosylase I (3.2.2.20), i.e. adenine DNA glycosylase [N1202]
C12Y302/02021 . . DNA-3-methyladenine glycosylase II (3.2.2.21) [N1202]
C12Y302/02022 . . rRNA N-glycosylase (3.2.2.22) [N1204]
C12Y302/02023 . . DNA-formamidopyrimidine glycosylase (3.2.2.23) [N1202]
C12Y302/02024 . . ADP-ribosyl-[dinitrogen reductase] hydrolase (3.2.2.24) [N1202]
C12Y302/02025 . . N-Methyl nucleosidase (3.2.2.25) [N1204]
C12Y302/02026 . . Futalosine hydrolase (3.2.2.26) [N1204]
C12Y302/02027 . . Uracil-DNA glycosylase (3.2.2.27) [N1202]
C12Y302/02028 . . Double-stranded uracil-DNA glycosylase (3.2.2.28) [N1204]
C12Y302/02029 . . Thymine-DNA glycosylase (3.2.2.29) [N1204]

C12Y303/00 **Hydrolases acting on ether bonds (3.3)** [N1202]

C12Y303/01 . Thioether and trialkylsulfonium hydrolases (3.3.1) [N1202]
C12Y303/01001 . . Adenosylhomocysteinase (3.3.1.1) [N1202]
C12Y303/01002 . . Adenosylmethionine hydrolase (3.3.1.2) [N1204]

C12Y303/02 . Ether hydrolases (3.3.2) [N1202]
C12Y303/02001 . . Isochorismatase (3.3.2.1) [N1202]
C12Y303/02002 . . Alkenylglycerophosphocholine hydrolase (3.3.2.2) [N1204]
C12Y303/02003 . . Epoxide hydrolase (3.3.2.3) (C12Y303/02009 or C12Y303/02010 takes precedence) [N1202]
C12Y303/02004 . . Trans-epoxysuccinate hydrolase (3.3.2.4) [N1204]
C12Y303/02005 . . Alkenylglycerophosphoethanolamine hydrolase (3.3.2.5) [N1204]
C12Y303/02006 . . Leukotriene-A4 hydrolase (3.3.2.6) [N1202]
C12Y303/02007 . . Hepoxilin-epoxide hydrolase (3.3.2.7) [N1204]
C12Y303/02008 . . Limonene-1,2-epoxide hydrolase (3.3.2.8) [N1204]
C12Y303/02009 . . Microsomal epoxide hydrolase (3.3.2.9), i.e. styreneepoxide hydrolase [N1202]
C12Y303/02010 . . Soluble epoxide hydrolase (3.3.2.10) [N1202]
C12Y303/02011 . . Cholesterol-5,6-oxide hydrolase (3.3.2.11) [N1202]

C12Y304/00 **Hydrolases acting on peptide bonds i.e. peptidases (3.4)** [N1202]

C12Y304/11 . Aminopeptidases (3.4.11) [N1202]
C12Y304/11001 . . Leucyl aminopeptidase (3.4.11.1) [N1202]
C12Y304/11002 . . Membrane alanyl aminopeptidase (3.4.11.2), i.e. aminopeptidase N [N1202]
C12Y304/11003 . . Cystinyl aminopeptidase (3.4.11.3) [N1204]
C12Y304/11004 . . Tripeptide aminopeptidase (3.4.11.4) [N1202]
C12Y304/11005 . . Prolyl aminopeptidase (3.4.11.5) [N1202]
C12Y304/11006 . . Aminopeptidase B (3.4.11.6) [N1204]
C12Y304/11007 . . Glutamyl aminopeptidase (3.4.11.7) [N1204]
C12Y304/11009 . . Xaa-Pro aminopeptidase (3.4.11.9), i.e. aminopeptidase P [N1202]
C12Y304/11010 . . Bacterial leucyl aminopeptidase (3.4.11.10) [N1204]
C12Y304/11011 . . Aminopeptidase (3.4.11.11) [N1202]
C12Y304/11013 . . Clostridial aminopeptidase (3.4.11.13) [N1204]
C12Y304/11014 . . Cytosol alanyl aminopeptidase (3.4.11.14) [N1204]
C12Y304/11015 . . Aminopeptidase Y (3.4.11.15), i.e. lysyl aminopeptidase [N1204]
C12Y304/11016 . . Xaa-Trp aminopeptidase (3.4.11.16) [N1204]
C12Y304/11017 . . Tryptophanyl aminopeptidase (3.4.11.17) [N1204]
C12Y304/11018 . . Methionyl aminopeptidase (3.4.11.18) [N1202]
C12Y304/11019 . . D-Stereospecific aminopeptidase (3.4.11.19) [N1204]
C12Y304/11020 . . Aminopeptidase Ey (3.4.11.20) [N1204]
C12Y304/11021 . . Aspartyl aminopeptidase (3.4.11.21) [N1204]

C12Y304/11022 . . Aminopeptidase I (3.4.11.22) [N1204]
C12Y304/11023 . . PepB aminopeptidase (3.4.11.23) [N1204]
C12Y304/11024 . . Aminopeptidase S (3.4.11.24) [N1204]
C12Y304/11025 . . Beta-peptidyl aminopeptidase (3.4.11.25) [N1204]
C12Y304/11026 . . Intermediate cleaving peptidase 55 (3.4.11.26) [N1204]

C12Y304/13 . Dipeptidases (3.4.13) [N1202]
C12Y304/13003 . . Xaa-His dipeptidase (3.4.13.3) (C12Y304/13018, C12Y304/13020 take precedence) [N1204]
C12Y304/13004 . . Xaa-Arg dipeptidase (3.4.13.4) [N1204]
C12Y304/13005 . . Xaa-methyl-His dipeptidase (3.4.13.5) [N1204]
C12Y304/13007 . . Glu-Glu dipeptidase (3.4.13.7) [N1204]
C12Y304/13009 . . Xaa-Pro dipeptidase (3.4.13.9) i.e prolidase [N1202]
C12Y304/13011 . . Dipeptidase (3.4.13.11) (C12Y304/13018 or C12Y304/13019 takes precedence) [N1202]
C12Y304/13012 . . Met-Xaa dipeptidase (3.4.13.12) [N1204]
C12Y304/13017 . . Non-stereospecific dipeptidase (3.4.13.17) [N1204]
C12Y304/13018 . . Cytosol nonspecific dipeptidase (3.4.13.18), i.e. glycyl-leucine dipeptidase [N1202]
C12Y304/13019 . . Membrane dipeptidase (3.4.13.19) [N1202]
C12Y304/13020 . . Beta-Ala-His dipeptidase (3.4.13.20) [N1204]
C12Y304/13021 . . Dipeptidase E (3.4.13.21) [N1204]
C12Y304/13022 . . D-Ala-D-Ala dipeptidase (3.4.13.22) [N1204]

C12Y304/14 . Dipeptidyl-peptidases and tripeptidyl-peptidases (3.4.14) [N1202]
C12Y304/14001 . . Dipeptidyl-peptidase I (3.4.14.1), i.e. cathepsin-C [N1202]
C12Y304/14002 . . Dipeptidyl-peptidase II (3.4.14.2) [N1202]
C12Y304/14004 . . Dipeptidyl-peptidase III (3.4.14.4) [N1204]
C12Y304/14005 . . Dipeptidyl-peptidase IV (3.4.14.5) [N1202]
C12Y304/14006 . . Dipeptidyl-dipeptidase (3.4.14.6) [N1204]
C12Y304/14008 . . Tripeptidyl peptidase (3.4.14.8) (C12Y304/14009, C12Y304/14010 take precedence) [N1204]
C12Y304/14009 . . Tripeptidyl-peptidase I (3.4.14.9) [N1202]
C12Y304/14010 . . Tripeptidyl-peptidase II (3.4.14.10) [N1202]
C12Y304/14011 . . Xaa-Pro dipeptidyl-peptidase (3.4.14.11) [N1204]
C12Y304/14012 . . Xaa-Xaa-Pro tripeptidyl-peptidase (3.4.14.12), i.e. prolyltripeptidyl aminopeptidase [N1204]

C12Y304/15 . Peptidyl-dipeptidases (3.4.15) [N1202]
C12Y304/15001 . . Peptidyl-dipeptidase A (3.4.15.1) [N1202]
C12Y304/15004 . . Peptidyl-dipeptidase B (3.4.15.4) [N1204]
C12Y304/15005 . . Peptidyl-dipeptidase Dcp (3.4.15.5) [N1202]
C12Y304/15006 . . Cyanophycinase (3.4.15.6) [N1204]

C12Y304/16 . Serine-type carboxypeptidases (3.4.16) [N1202]
C12Y304/16001 . . Serine carboxypeptidase (3.4.16.1) (C12Y304/16005, C12Y304/16006 take

precedence) [N1204]

C12Y304/16002 . . Lysosomal Pro-Xaa carboxypeptidase (3.4.16.2) [N1202]
C12Y304/16004 . . Serine-type D-Ala-D-Ala carboxypeptidase (3.4.16.4) [N1204]
C12Y304/16005 . . Carboxypeptidase C (3.4.16.5), i.e. carboxypeptidase Y [N1202]
C12Y304/16006 . . Carboxypeptidase D (3.4.16.6) [N1202]

C12Y304/17 . Metallocarboxypeptidases (3.4.17) [N1202]
C12Y304/17001 . . Carboxypeptidase A (3.4.17.1) [N1202]
C12Y304/17002 . . Carboxypeptidase B (3.4.17.2) [N1202]
C12Y304/17003 . . Lysine carboxypeptidase (3.4.17.3) [N1202]
C12Y304/17004 . . Gly-Xaa carboxypeptidase (3.4.17.4) [N1202]
C12Y304/17006 . . Alanine carboxypeptidase (3.4.17.6) [N1202]
C12Y304/17008 . . Muramoylpentapeptide carboxypeptidase (3.4.17.8) [N1204]
C12Y304/17010 . . Carboxypeptidase E (3.4.17.10) [N1204]
C12Y304/17011 . . Glutamate carboxypeptidase (3.4.17.11) [N1202]
C12Y304/17012 . . Carboxypeptidase M (3.4.17.12) [N1204]
C12Y304/17013 . . Muramoyltetrapeptide carboxypeptidase (3.4.17.13) [N1204]
C12Y304/17014 . . Zinc D-Ala-D-Ala carboxypeptidase (3.4.17.14) [N1204]
C12Y304/17015 . . Carboxypeptidase A2 (3.4.17.15) [N1204]
C12Y304/17016 . . Membrane Pro-Xaa carboxypeptidase (3.4.17.16) [N1204]
C12Y304/17017 . . Tubulinyl-Tyr carboxypeptidase (3.4.17.17) [N1204]
C12Y304/17018 . . Carboxypeptidase T (3.4.17.18) [N1204]
C12Y304/17019 . . Carboxypeptidase Taq (3.4.17.19) [N1204]
C12Y304/17020 . . Carboxypeptidase U (3.4.17.20) [N1204]
C12Y304/17021 . . Glutamate carboxypeptidase II (3.4.17.21) [N1204]
C12Y304/17022 . . Metallocarboxypeptidase D (3.4.17.22) [N1204]
C12Y304/17023 . . Angiotensin-converting enzyme 2 (3.4.17.23) [N1204]

C12Y304/18 . Cysteine-type carboxypeptidases (3.4.18) [N1202]
C12Y304/18001 . . Cathepsin X (3.4.18.1) [N1204]

C12Y304/19 . Omega peptidases (3.4.19) [N1202]
C12Y304/19001 . . Acylaminoacyl-peptidase (3.4.19.1) [N1204]
C12Y304/19002 . . Peptidyl-glycinamidase (3.4.19.2) [N1204]
C12Y304/19003 . . Pyroglutamyl-peptidase I (3.4.19.3) [N1204]
C12Y304/19005 . . Beta-aspartyl-peptidase (3.4.19.5) [N1204]
C12Y304/19006 . . Pyroglutamyl-peptidase II (3.4.19.6) [N1202]
C12Y304/19007 . . N-Formylmethionyl-peptidase (3.4.19.7) [N1204]
C12Y304/19009 . . Gamma-glutamyl hydrolase (3.4.19.9) [N1202]
C12Y304/19011 . . Gamma-D-glutamyl-meso-diaminopimelate peptidase (3.4.19.11) [N1202]
C12Y304/19012 . . Ubiquitinyl hydrolase 1 (3.4.19.12) [N1202]
C12Y304/19013 . . Glutathione hydrolase 1 (3.4.19.13) [N1204]

C12Y304/21 . Serine endopeptidases (3.4.21) [N1202]

C12Y304/21001 . . Chymotrypsin (3.4.21.1) [N1202]
C12Y304/21002 . . Chymotrypsin C (3.4.21.2) [N1202]
C12Y304/21003 . . Metridin (3.4.21.3) [N1204]
C12Y304/21004 . . Trypsin (3.4.21.4) [N1202]
C12Y304/21005 . . Thrombin (3.4.21.5) [N1202]
C12Y304/21006 . . Coagulation factor Xa (3.4.21.6) [N1202]
C12Y304/21007 . . Plasmin (3.4.21.7), i.e. fibrinolysin [N1202]
C12Y304/21008 . . Kallikrein (3.4.21.8) (C12Y304/21034, C12Y304/21035 take precedence) [N1204]
C12Y304/21009 . . Enteropeptidase (3.4.21.9), i.e. enterokinase [N1202]
C12Y304/21010 . . Acrosin (3.4.21.10) [N1204]
C12Y304/21011 . . Elastase (3.4.21.11) (C12Y304/21036 or C12Y304/21037 takes precedence) [N1202]
C12Y304/21012 . . Alpha-lytic endopeptidase (3.4.21.12) [N1202]
C12Y304/21014 . . Microbial serine proteases (3.4.21.14) (C12Y304/21062-C12Y304/67 takes precedence) [N1202]
C12Y304/21019 . . Glutamyl endopeptidase (3.4.21.19) [N1202]
C12Y304/21020 . . Cathepsin G (3.4.21.20) [N1202]
C12Y304/21021 . . Coagulation factor VIIa (3.4.21.21) [N1202]
C12Y304/21022 . . Coagulation factor IXa (3.4.21.22) [N1202]
C12Y304/21025 . . Cucumisin (3.4.21.25) [N1202]
C12Y304/21026 . . Prolyl oligopeptidase (3.4.21.26), i.e. proline-specific endopeptidase [N1202]
C12Y304/21027 . . Coagulation factor XIa (3.4.21.27) [N1202]
C12Y304/21031 . . Urokinase (3.4.21.31) (C12Y304/21068 or C12Y304/21073 takes precedence) [N1202]
C12Y304/21032 . . Brachyurin (3.4.21.32) [N1204]
C12Y304/21034 . . Plasma kallikrein (3.4.21.34) [N1202]
C12Y304/21035 . . Tissue kallikrein (3.4.21.35) [N1202]
C12Y304/21036 . . Pancreatic elastase (3.4.21.36) [N1202]
C12Y304/21037 . . Leukocyte elastase (3.4.21.37), i.e. neutrophil-elastase [N1202]
C12Y304/21038 . . Coagulation factor XIIa (3.4.21.38) [N1202]
C12Y304/21039 . . Chymase (3.4.21.39) [N1202]
C12Y304/21041 . . Complement subcomponent C1r (3.4.21.41) [N1202]
C12Y304/21042 . . Complement subcomponent C1s (3.4.21.42) [N1204]
C12Y304/21043 . . Classical-complement-pathway C3/C5 convertase (3.4.21.43) [N1202]
C12Y304/21045 . . Complement factor I (3.4.21.45) [N1204]
C12Y304/21046 . . Complement factor D (3.4.21.46) [N1204]
C12Y304/21047 . . Alternative-complement-pathway C3/C5 convertase (3.4.21.47), i.e. properdin factor B [N1202]
C12Y304/21048 . . Cerevisin (3.4.21.48) [N1204]
C12Y304/21049 . . Hypodermin C (3.4.21.49) [N1204]
C12Y304/21050 . . Lysyl endopeptidase (3.4.21.50) [N1202]
C12Y304/21053 . . Endopeptidase La (3.4.21.53) [N1202]
C12Y304/21054 . . Gamma-renin (3.4.21.54) [N1204]

C12Y304/21055 . . Venombin AB (3.4.21.55) [N1204]
C12Y304/21057 . . Leucyl endopeptidase (3.4.21.57) [N1202]
C12Y304/21059 . . Tryptase (3.4.21.59) [N1202]
C12Y304/21060 . . Scutelarin (3.4.21.60) [N1204]
C12Y304/21061 . . Kexin (3.4.21.61), i.e. proprotein convertase subtilisin/kexin type 9 [N1202]
C12Y304/21062 . . Subtilisin (3.4.21.62) [N1202]
C12Y304/21063 . . Oryzin (3.4.21.63) [N1202]
C12Y304/21064 . . Peptidase K (3.4.21.64) [N1202]
C12Y304/21065 . . Thermomycolin (3.4.21.65) [N1202]
C12Y304/21066 . . Thermitase (3.4.21.66) [N1202]
C12Y304/21067 . . Endopeptidase So (3.4.21.67) [N1202]
C12Y304/21068 . . Tissue plasminogen activator (3.4.21.68), i.e. tPA [N1202]
C12Y304/21069 . . Protein C activated (3.4.21.69) [N1202]
C12Y304/21070 . . Pancreatic endopeptidase E (3.4.21.70) [N1204]
C12Y304/21071 . . Pancreatic elastase II (3.4.21.71) [N1202]
C12Y304/21072 . . IgA-specific serine endopeptidase (3.4.21.72) [N1204]
C12Y304/21073 . . u-Plasminogen activator (3.4.21.73), i.e. urokinase [N1202]
C12Y304/21074 . . Venombin A (3.4.21.74) [N1204]
C12Y304/21075 . . Furin (3.4.21.75) [N1202]
C12Y304/21076 . . Myeloblastin (3.4.21.76) [N1202]
C12Y304/21077 . . Semenogelase (3.4.21.77), i.e. prostate specific antigen or PSA or kallikrein 3 [N1202]
C12Y304/21078 . . Granzyme A (3.4.21.78) [N1202]
C12Y304/21079 . . Granzyme B (3.4.21.79) [N1202]
C12Y304/21080 . . Streptogrisin A (3.4.21.80) [N1204]
C12Y304/21081 . . Streptogrisin B (3.4.21.81) [N1204]
C12Y304/21082 . . Glutamyl endopeptidase II (3.4.21.82) [N1204]
C12Y304/21083 . . Oligopeptidase B (3.4.21.83), i.e. trypsin-like protease [N1202]
C12Y304/21084 . . limulus clotting factor C (3.4.21.84) [N1202]
C12Y304/21085 . . Limulus clotting factor B (3.4.21.85) [N1204]
C12Y304/21086 . . Limulus clotting enzyme (3.4.21.86) [N1204]
C12Y304/21088 . . Repressor LexA (3.4.21.88) [N1204]
C12Y304/21089 . . Signal peptidase I (3.4.21.89) [N1204]
C12Y304/21090 . . Togavirin (3.4.21.90) [N1204]
C12Y304/21091 . . Flavivirin (3.4.21.91) [N1204]
C12Y304/21092 . . Endopeptidase Clp (3.4.21.92) [N1204]
C12Y304/21093 . . Proprotein convertase 1 (3.4.21.93) [N1204]
C12Y304/21094 . . Proprotein convertase 2 (3.4.21.94), i.e. prohormone convertase 2 [N1202]
C12Y304/21095 . . Snake venom factor V activator (3.4.21.95) [N1204]
C12Y304/21096 . . Lactocepin (3.4.21.96) [N1202]
C12Y304/21097 . . Assemblin (3.4.21.97) [N1204]
C12Y304/21098 . . Hepacivirin (3.4.21.98) [N1204]

C12Y304/21099 . . Spermosin (3.4.21.99) [N1204]
C12Y304/21100 . . Sedolisin (3.4.21.100) [N1204]
C12Y304/21101 . . Xanthomonalisin (3.4.21.101) [N1204]
C12Y304/21102 . . C-terminal processing peptidase (3.4.21.102) [N1204]
C12Y304/21103 . . Physarolisin (3.4.21.103), i.e. physaropepsin [N1202]
C12Y304/21104 . . Mannan-binding lectin-associated serine protease-2 (3.4.21.104) [N1204]
C12Y304/21105 . . Rhomboid protease (3.4.21.105) [N1204]
C12Y304/21106 . . Hepsin (3.4.21.106) [N1202]
C12Y304/21107 . . Peptidase Do (3.4.21.107) [N1204]
C12Y304/21108 . . HtrA2 peptidase (3.4.21.108) [N1204]
C12Y304/21109 . . Matriptase (3.4.21.109) [N1202]
C12Y304/21110 . . C5a peptidase (3.4.21.110) [N1204]
C12Y304/21111 . . Aqualysin 1 (3.4.21.111) [N1204]
C12Y304/21112 . . Site-1 protease (3.4.21.112), i.e. subtilisin kexin isozyme-1 [N1202]
C12Y304/21113 . . Pestivirus NS3 polyprotein peptidase (3.4.21.113) [N1204]
C12Y304/21114 . . Equine arterivirus serine peptidase (3.4.21.114) [N1204]
C12Y304/21115 . . Infectious pancreatic necrosis birnavirus Vp4 peptidase (3.4.21.115) [N1204]
C12Y304/21116 . . SpoIVB peptidase (3.4.21.116) [N1204]
C12Y304/21117 . . Stratum corneum chymotryptic enzyme (3.4.21.117) [N1204]
C12Y304/21118 . . Kallikrein 8 (3.4.21.118) [N1204]
C12Y304/21119 . . Kallikrein 13 (3.4.21.119) [N1204]
C12Y304/21120 . . Oviductin (3.4.21.120) [N1204]
C12Y304/21826 . . Proprotein convertase 5 (3.4.21.B26) [N1202]

C12Y304/22 . Cysteine endopeptidases (3.4.22) [N1202]
C12Y304/22001 . . Cathepsin B (3.4.22.1) [N1202]
C12Y304/22002 . . Papain (3.4.22.2) [N1202]
C12Y304/22003 . . Ficain (3.4.22.3) [N1202]
C12Y304/22004 . . Bromelain (3.4.22.4) (C12Y304/22032 or C12Y304/22033 takes precedence) [N1202]
C12Y304/22006 . . Chymopapain (3.4.22.6) [N1204]
C12Y304/22007 . . Asclepain (3.4.22.7) [N1204]
C12Y304/22008 . . Clostripain (3.4.22.8) [N1202]
C12Y304/22010 . . Streptopain (3.4.22.10) [N1202]
C12Y304/22014 . . Actinidain (3.4.22.14) [N1202]
C12Y304/22015 . . Cathepsin L (3.4.22.15) [N1202]
C12Y304/22016 . . Cathepsin H (3.4.22.16) [N1204]
C12Y304/22017 . . Calpain (3.4.22.17) (C12Y304/22052, C12Y304/22053 take precedence) [N1204]
C12Y304/22024 . . Cathepsin T (3.4.22.24) [N1204]
C12Y304/22025 . . Glycyl endopeptidase (3.4.22.25) [N1202]
C12Y304/22026 . . Cancer procoagulant (3.4.22.26) [N1204]
C12Y304/22027 . . Cathepsin S (3.4.22.27) [N1202]
C12Y304/22028 . . Picornain 3C (3.4.22.28) [N1204]

C12Y304/22029 . . Picornain 2A (3.4.22.29) [N1204]
C12Y304/22030 . . Caricain (3.4.22.30) [N1204]
C12Y304/22031 . . Ananain (3.4.22.31) [N1204]
C12Y304/22032 . . Stem bromelain (3.4.22.32) [N1202]
C12Y304/22033 . . Fruit bromelain (3.4.22.33), i.e. juice bromelain [N1202]
C12Y304/22034 . . Legumain (3.4.22.34), i.e. asparaginyl endopeptidase [N1202]
C12Y304/22035 . . Histolysain (3.4.22.35) [N1202]
C12Y304/22036 . . Caspase-1 (3.4.22.36), i.e. interleukin-1-beta-convertase [N1202]
C12Y304/22037 . . Gingipain R (3.4.22.37) [N1204]
C12Y304/22038 . . Cathepsin K (3.4.22.38) [N1202]
C12Y304/22039 . . Adenain (3.4.22.39) [N1202]
C12Y304/22040 . . Bleomycin hydrolase (3.4.22.40) [N1204]
C12Y304/22041 . . Cathepsin F (3.4.22.41) [N1204]
C12Y304/22042 . . Cathepsin O (3.4.22.42) [N1204]
C12Y304/22043 . . Cathepsin V (3.4.22.43) [N1204]
C12Y304/22044 . . Nuclear-inclusion-a endopeptidase (3.4.22.44) [N1202]
C12Y304/22045 . . Helper-component proteinase (3.4.22.45) [N1204]
C12Y304/22046 . . L-Peptidase (3.4.22.46) [N1204]
C12Y304/22047 . . Gingipain K (3.4.22.47) [N1204]
C12Y304/22048 . . Staphopain (3.4.22.48) [N1204]
C12Y304/22049 . . Separase (3.4.22.49) [N1204]
C12Y304/22050 . . V-Cath endopeptidase (3.4.22.50) [N1204]
C12Y304/22051 . . Cruzipain (3.4.22.51) [N1204]
C12Y304/22052 . . Calpain-1 (3.4.22.52) [N1202]
C12Y304/22053 . . Calpain-2 (3.4.22.53), i.e. m-calpain [N1202]
C12Y304/22054 . . Calpain-3 (3.4.22.54), i.e. calpain p94 [N1202]
C12Y304/22055 . . Caspase-2 (3.4.22.55) [N1202]
C12Y304/22056 . . Caspase-3 (3.4.22.56) [N1202]
C12Y304/22057 . . Caspase-4 (3.4.22.57) [N1202]
C12Y304/22058 . . Caspase-5 (3.4.22.58) [N1202]
C12Y304/22059 . . Caspase-6 (3.4.22.59) [N1202]
C12Y304/22060 . . Caspase-7 (3.4.22.60) [N1202]
C12Y304/22061 . . Caspase-8 (3.4.22.61) [N1202]
C12Y304/22062 . . Caspase-9 (3.4.22.62) [N1202]
C12Y304/22063 . . Caspase-10 (3.4.22.63) [N1202]
C12Y304/22064 . . Caspase-11 (3.4.22.64) [N1202]
C12Y304/22065 . . Peptidase 1 (mite) (3.4.22.65) [N1204]
C12Y304/22066 . . Calicivirin (3.4.22.66) [N1204]
C12Y304/22067 . . Zingipain (3.4.22.67) [N1204]
C12Y304/22068 . . Ulp1 peptidase (3.4.22.68) [N1204]
C12Y304/22069 . . SARS coronavirus main proteinase (3.4.22.69) [N1204]
C12Y304/22070 . . Sortase A (3.4.22.70) [N1204]

C12Y304/22071 . . Sortase B (3.4.22.71) [N1204]

C12Y304/23 . Aspartic endopeptidases (3.4.23) [N1202]
C12Y304/23001 . . Pepsin A (3.4.23.1) [N1202]
C12Y304/23002 . . Pepsin B (3.4.23.2) [N1202]
C12Y304/23003 . . Gastricsin (3.4.23.3) [N1202]
C12Y304/23004 . . Chymosin (3.4.23.4), i.e. rennin [N1202]
C12Y304/23005 . . Cathepsin D (3.4.23.5) [N1202]
C12Y304/23006 . . Microbial carboxyl proteinases (3.4.23.6) (C12Y304/23018-C12Y304/23028 or C12Y304/23030 takes precedence) [N1202]
C12Y304/23012 . . Nepenthesin (3.4.23.12) [N1204]
C12Y304/23015 . . Renin (3.4.23.15) [N1202]
C12Y304/23016 . . HIV-1 retropepsin (3.4.23.16) [N1204]
C12Y304/23017 . . Pro-opiomelanocortin converting enzyme (3.4.23.17) [N1204]
C12Y304/23018 . . Aspergillopepsin I (3.4.23.18) [N1202]
C12Y304/23019 . . Aspergillopepsin II (3.4.23.19) [N1202]
C12Y304/23020 . . Penicillopepsin (3.4.23.20) [N1202]
C12Y304/23021 . . Rhizopuspepsin (3.4.23.21) [N1202]
C12Y304/23022 . . Endothiapepsin (3.4.23.22) [N1202]
C12Y304/23023 . . Mucorpepsin (3.4.23.23) [N1202]
C12Y304/23024 . . Candidapepsin (3.4.23.24) [N1202]
C12Y304/23025 . . Saccharopepsin (3.4.23.25), i.e. yeast proteinase A [N1202]
C12Y304/23026 . . Rhodotorulapepsin (3.4.23.26) [N1202]
C12Y304/23028 . . Acrocylindropepsin (3.4.23.28) [N1202]
C12Y304/23029 . . Polyporopepsin (3.4.23.29) [N1204]
C12Y304/23030 . . Pycnoporopepsin (3.4.23.30) [N1202]
C12Y304/23031 . . Scytalidopepsin A (3.4.23.31) [N1204]
C12Y304/23032 . . Scytalidopepsin B (3.4.23.32) [N1204]
C12Y304/23034 . . Cathepsin E (3.4.23.34) [N1204]
C12Y304/23035 . . Barrierpepsin (3.4.23.35) [N1204]
C12Y304/23036 . . Signal peptidase II (3.4.23.36) [N1204]
C12Y304/23038 . . Plasmepsin I (3.4.23.38) [N1204]
C12Y304/23039 . . Plasmepsin II (3.4.23.39) [N1204]
C12Y304/23040 . . Phytepsin (3.4.23.40) [N1204]
C12Y304/23041 . . Yapsin 1 (3.4.23.41) [N1204]
C12Y304/23042 . . Thermopsin (3.4.23.42) [N1204]
C12Y304/23043 . . Prepilin peptidase (3.4.23.43) [N1204]
C12Y304/23044 . . Nodavirus endopeptidase (3.4.23.44) [N1204]
C12Y304/23045 . . Memapsin 1 (3.4.23.45), i.e. beta-secretase 2 or BACE2 [N1202]
C12Y304/23046 . . Memapsin 2 (3.4.23.46), i.e. beta-secretase 1 or BACE [N1202]
C12Y304/23047 . . HIV-2 retropepsin (3.4.23.47) [N1204]
C12Y304/23048 . . Plasminogen activator Pla (3.4.23.48) [N1204]
C12Y304/23049 . . Omptin (3.4.23.49) [N1204]

C12Y304/23050 . . Human endogenous retrovirus K endopeptidase (3.4.23.50) [N1204]
C12Y304/23051 . . HycI peptidase (3.4.23.51) [N1204]
C12Y304/23052 . . Preflagellin peptidase (3.4.23.52) [N1204]

C12Y304/24 . Metalloendopeptidases (3.4.24) [N1202]
C12Y304/24001 . . Atrolysin A (3.4.24.1) [N1204]
C12Y304/24003 . . Microbial collagenase (3.4.24.3) [N1202]
C12Y304/24004 . . Microbial metalloproteinases (3.4.24.4) (C12Y304/24025-C12Y304/24032, C12Y304/24039 or C12Y304/24040 takes precedence) [N1202]
C12Y304/24005 . . Lens neutral proteinase (3.4.24.5) (C12Y304/22052, C12Y304/22053,, C12Y304/25001 take precedence) [N1204]
C12Y304/24006 . . Leucolysin (3.4.24.6) [N1204]
C12Y304/24007 . . Interstitial collagenase (3.4.24.7), i.e. matrix metalloprotease 1 or MMP1 [N1202]
C12Y304/24011 . . Neprilysin (3.4.24.11), i.e. enkephalinase or neutral endopeptidase 24.11 [N1202]
C12Y304/24012 . . Envelysin (3.4.24.12) [N1204]
C12Y304/24013 . . IgA-specific metalloendopeptidase (3.4.24.13) [N1204]
C12Y304/24014 . . Procollagen N-endopeptidase (3.4.24.14) [N1204]
C12Y304/24015 . . Thimet oligopeptidase (3.4.24.15) [N1204]
C12Y304/24016 . . Neurolysin (3.4.24.16) [N1202]
C12Y304/24017 . . Stromelysin 1 (3.4.24.17) [N1202]
C12Y304/24018 . . Meprin A (3.4.24.18) [N1204]
C12Y304/24019 . . Procollagen C-endopeptidase (3.4.24.19) [N1204]
C12Y304/24020 . . Peptidyl-Lys metalloendopeptidase (3.4.24.20) [N1204]
C12Y304/24021 . . Astacin (3.4.24.21) [N1204]
C12Y304/24022 . . Stromelysin 2 (3.4.24.22) [N1202]
C12Y304/24023 . . Matrilysin (3.4.24.23) [N1202]
C12Y304/24024 . . Gelatinase A (3.4.24.24), i.e. matrix metalloproteinase 2 or MMP2 [N1202]
C12Y304/24025 . . Vibriolysin (3.4.24.25) [N1202]
C12Y304/24026 . . Pseudolysin (3.4.24.26) [N1202]
C12Y304/24027 . . Thermolysin (3.4.24.27) [N1202]
C12Y304/24028 . . Bacillolysin (3.4.24.28) [N1202]
C12Y304/24029 . . Aureolysin (3.4.24.29) [N1202]
C12Y304/24030 . . Coccolysin (3.4.24.30) [N1202]
C12Y304/24031 . . Mycolysin (3.4.24.31) [N1202]
C12Y304/24032 . . Beta-lytic metalloendopeptidase (3.4.24.32) [N1202]
C12Y304/24033 . . Peptidyl-Asp metalloendopeptidase (3.4.24.33) [N1202]
C12Y304/24034 . . Neutrophil collagenase (3.4.24.34) [N1204]
C12Y304/24035 . . Gelatinase B (3.4.24.35), i.e. matrix metalloprotease 9 or MMP9 [N1202]
C12Y304/24036 . . Leishmanolysin (3.4.24.36) [N1204]
C12Y304/24037 . . Saccharolysin (3.4.24.37), i.e. yeast cysteine proteinase D [N1202]
C12Y304/24038 . . Gametolysin (3.4.24.38), i.e. cell wall lytic enzyme [N1202]
C12Y304/24039 . . Deuterolysin (3.4.24.39) [N1202]
C12Y304/24040 . . Serralysin (3.4.24.40) [N1202]

C12Y304/24041 . . Atrolysin B (3.4.24.41) [N1204]
C12Y304/24042 . . Atrolysin C (3.4.24.42) [N1204]
C12Y304/24043 . . Atroxase (3.4.24.43) [N1204]
C12Y304/24044 . . Atrolysin E (3.4.24.44) [N1204]
C12Y304/24045 . . Atrolysin F (3.4.24.45) [N1204]
C12Y304/24046 . . Adamalysin (3.4.24.46) [N1204]
C12Y304/24047 . . Horrilysin (3.4.24.47) [N1204]
C12Y304/24048 . . Ruberlysin (3.4.24.48) [N1204]
C12Y304/24049 . . Bothropasin (3.4.24.49) [N1204]
C12Y304/24050 . . Bothrolysin (3.4.24.50) [N1204]
C12Y304/24051 . . Ophiolysin (3.4.24.51) [N1204]
C12Y304/24052 . . Trimerelysin I (3.4.24.52) [N1204]
C12Y304/24053 . . Trimerelysin II (3.4.24.53) [N1204]
C12Y304/24054 . . Mucrolysin (3.4.24.54) [N1204]
C12Y304/24055 . . Pitrilysin (3.4.24.55) [N1204]
C12Y304/24056 . . Insulysin (3.4.24.56) [N1202]
C12Y304/24057 . . O-Sialoglycoprotein endopeptidase (3.4.24.57), i.e. glycoprotease [N1202]
C12Y304/24058 . . Russellysin (3.4.24.58) [N1204]
C12Y304/24059 . . Mitochondrial intermediate peptidase (3.4.24.59) [N1204]
C12Y304/24060 . . Dactylysin (3.4.24.60) [N1204]
C12Y304/24061 . . Nardilysin (3.4.24.61) [N1204]
C12Y304/24062 . . Magnolysin (3.4.24.62) [N1204]
C12Y304/24063 . . Meprin B (3.4.24.63) [N1204]
C12Y304/24064 . . Mitochondrial processing peptidase (3.4.24.64) [N1204]
C12Y304/24065 . . Macrophage elastase (3.4.24.65), i.e. metalloelastase [N1202]
C12Y304/24066 . . Choriolysin L (3.4.24.66) [N1204]
C12Y304/24067 . . Choriolysin H (3.4.24.67) [N1204]
C12Y304/24068 . . Tentoxilysin (3.4.24.68), i.e. tetanus neurotoxin [N1202]
C12Y304/24069 . . Bontoxilysin (3.4.24.69), i.e. botulinum neurotoxin [N1202]
C12Y304/24070 . . Oligopeptidase A (3.4.24.70) [N1204]
C12Y304/24071 . . Endothelin-converting enzyme 1 (3.4.24.71) [N1202]
C12Y304/24072 . . Fibrolase (3.4.24.72) [N1204]
C12Y304/24073 . . Jararhagin (3.4.24.73) [N1204]
C12Y304/24074 . . Fragilysin (3.4.24.74) [N1204]
C12Y304/24075 . . Lysostaphin (3.4.24.75) [N1204]
C12Y304/24076 . . Flavastacin (3.4.24.76) [N1204]
C12Y304/24077 . . Snapalysin (3.4.24.77) [N1204]
C12Y304/24078 . . GPR endopeptidase (3.4.24.78) [N1204]
C12Y304/24079 . . Pappalysin-1 (3.4.24.79) [N1204]
C12Y304/24080 . . Membrane-type matrix metalloproteinase-1 (3.4.24.80) [N1204]
C12Y304/24081 . . ADAM10 endopeptidase (3.4.24.81) [N1204]
C12Y304/24082 . . ADAMTS-4 endopeptidase (3.4.24.82), i.e. aggrecanase 1 [N1202]

C12Y304/24083 . . Anthrax lethal factor endopeptidase (3.4.24.83) [N1204]
C12Y304/24084 . . Ste24 endopeptidase (3.4.24.84) [N1204]
C12Y304/24085 . . S2P endopeptidase (3.4.24.85) [N1204]
C12Y304/24086 . . ADAM 17 endopeptidase (3.4.24.86), i.e. TNF-alpha converting enyzme [N1202]
C12Y304/24087 . . ADAMTS13 endopeptidase (3.4.24.87) [N1202]
C12Y304/24812 . . ADAMTS5 endopeptidase (3.4.24.B12) i.e. aggrecanase 2 [N1202]

C12Y304/25 . Threonine endopeptidases (3.4.25) [N1202]
C12Y304/25001 . . Proteasome endopeptidase complex (3.4.25.1) [N1202]
C12Y304/25002 . . HslU--HslV peptidase (3.4.25.2) [N1204]

C12Y305/00 Hydrolases acting on carbon-nitrogen bonds, other than peptide bonds (3.5) [N1202]

C12Y305/01 . in linear amides (3.5.1) [N1202]
C12Y305/01001 . . Asparaginase (3.5.1.1) [N1202]
C12Y305/01002 . . Glutaminase (3.5.1.2) [N1202]
C12Y305/01003 . . Omega-amidase (3.5.1.3) [N1202]
C12Y305/01004 . . Amidase (3.5.1.4) [N1202]
C12Y305/01005 . . Urease (3.5.1.5) [N1202]
C12Y305/01006 . . Beta-ureidopropionase (3.5.1.6) [N1204]
C12Y305/01007 . . Ureidosuccinase (3.5.1.7) [N1204]
C12Y305/01008 . . Formylaspartate deformylase (3.5.1.8) [N1204]
C12Y305/01009 . . Arylformamidase (3.5.1.9) [N1204]
C12Y305/01010 . . Formyltetrahydrofolate deformylase (3.5.1.10) [N1202]
C12Y305/01011 . . Penicillin amidase (3.5.1.11), i.e. penicillin-amidohydrolase [N1202]
C12Y305/01012 . . Biotinidase (3.5.1.12) [N1204]
C12Y305/01013 . . Aryl-acylamidase (3.5.1.13) [N1204]
C12Y305/01014 . . Aminoacylase (3.5.1.14) [N1202]
C12Y305/01015 . . Aspartoacylase (3.5.1.15) [N1204]
C12Y305/01016 . . Acetylornithine deacetylase (3.5.1.16) [N1204]
C12Y305/01017 . . Acyl-lysine deacylase (3.5.1.17) [N1204]
C12Y305/01018 . . Succinyl-diaminopimelate desuccinylase (3.5.1.18) [N1204]
C12Y305/01019 . . Nicotinamidase (3.5.1.19) [N1202]
C12Y305/01020 . . Citrullinase (3.5.1.20) [N1204]
C12Y305/01021 . . N-Acetyl-beta-alanine deacetylase (3.5.1.21) [N1204]
C12Y305/01022 . . Pantothenase (3.5.1.22) [N1204]
C12Y305/01023 . . Ceramidase (3.5.1.23) [N1202]
C12Y305/01024 . . Choloylglycine hydrolase (3.5.1.24), i.e. bile salt hydrolase [N1202]
C12Y305/01025 . . N-Acetylglucosamine-6-phosphate deacetylase (3.5.1.25) [N1202]
C12Y305/01026 . . N4-(Beta-N-acetylglucosaminyl)-L-asparaginase (3.5.1.26) [N1202]
C12Y305/01027 . . N-Formylmethionylaminoacyl-tRNA deformylase (3.5.1.27) [N1204]
C12Y305/01028 . . N-Acetylmuramoyl-L-alanine amidase (3.5.1.28) [N1204]

C12Y305/01029 . . 2-(Acetamidomethylene)succinate hydrolase (3.5.1.29) [N1204]
C12Y305/01030 . . 5-Aminopentanamidase (3.5.1.30) [N1204]
C12Y305/01031 . . Formylmethionine deformylase (3.5.1.31) [N1202]
C12Y305/01032 . . Hippurate hydrolase (3.5.1.32) [N1204]
C12Y305/01033 . . N-Acetylglucosamine deacetylase (3.5.1.33) [N1202]
C12Y305/01035 . . D-Glutaminase (3.5.1.35) [N1204]
C12Y305/01036 . . N-Methyl-2-oxoglutaramate hydrolase (3.5.1.36) [N1204]
C12Y305/01038 . . Glutamin-(asparagin-)ase (3.5.1.38) [N1202]
C12Y305/01039 . . Alkylamidase (3.5.1.39) [N1204]
C12Y305/01040 . . Acylagmatine amidase (3.5.1.40) [N1204]
C12Y305/01041 . . Chitin deacetylase (3.5.1.41) [N1202]
C12Y305/01042 . . Nicotinamide-nucleotide amidase (3.5.1.42) [N1204]
C12Y305/01043 . . Peptidyl-glutaminase (3.5.1.43) [N1202]
C12Y305/01044 . . Protein-glutamine glutaminase (3.5.1.44) [N1202]
C12Y305/01046 . . 6-Aminohexanoate-dimer hydrolase (3.5.1.46) [N1204]
C12Y305/01047 . . N-Acetyldiaminopimelate deacetylase (3.5.1.47) [N1204]
C12Y305/01048 . . Acetylspermidine deacetylase (3.5.1.48) [N1204]
C12Y305/01049 . . Formamidase (3.5.1.49) [N1204]
C12Y305/01050 . . Pentanamidase (3.5.1.50) [N1204]
C12Y305/01051 . . 4-Acetamidobutyryl-CoA deacetylase (3.5.1.51) [N1204]
C12Y305/01052 . . Peptide-N4-(N-acetyl-beta-glucosaminyl)asparagine amidase (3.5.1.52), i.e. glycopeptidase [N1202]
C12Y305/01053 . . N-carbamoylputrescine amidase (3.5.1.53) [N1204]
C12Y305/01054 . . Allophanate hydrolase (3.5.1.54) [N1204]
C12Y305/01055 . . Long-chain-fatty-acyl-glutamate deacylase (3.5.1.55) [N1204]
C12Y305/01056 . . N,N-Dimethylformamidase (3.5.1.56) [N1204]
C12Y305/01057 . . Tryptophanamidase (3.5.1.57) [N1204]
C12Y305/01058 . . N-Benzyloxycarbonylglycine hydrolase (3.5.1.58) [N1204]
C12Y305/01059 . . N-Carbamoylsarcosine amidase (3.5.1.59) [N1204]
C12Y305/01060 . . N-(Long-chain-acyl)ethanolamine deacylase (3.5.1.60) [N1204]
C12Y305/01061 . . Mimosinase (3.5.1.61) [N1204]
C12Y305/01062 . . Acetylputrescine deacetylase (3.5.1.62) [N1204]
C12Y305/01063 . . 4-Acetamidobutyrate deacetylase (3.5.1.63) [N1204]
C12Y305/01064 . . Nalpha-benzyloxycarbonylleucine hydrolase (3.5.1.64) [N1204]
C12Y305/01065 . . Theanine hydrolase (3.5.1.65) [N1204]
C12Y305/01066 . . 2-(Hydroxymethyl)-3-(acetamidomethylene)succinate hydrolase (3.5.1.66) [N1204]
C12Y305/01067 . . 4-Methyleneglutaminase (3.5.1.67) [N1204]
C12Y305/01068 . . N-Formylglutamate deformylase (3.5.1.68) [N1204]
C12Y305/01069 . . Glycosphingolipid deacylase (3.5.1.69) [N1204]
C12Y305/01070 . . Aculeacin-A deacylase (3.5.1.70) [N1204]
C12Y305/01071 . . N-Feruloylglycine deacylase (3.5.1.71) [N1204]
C12Y305/01072 . . D-Benzoylarginine-4-nitroanilide amidase (3.5.1.72) [N1204]

C12Y305/01073 . . Carnitinamidase (3.5.1.73) [N1204]
C12Y305/01074 . . Chenodeoxycholoyltaurine hydrolase (3.5.1.74) [N1204]
C12Y305/01075 . . Urethanase (3.5.1.75) [N1202]
C12Y305/01076 . . Arylalkyl acylamidase (3.5.1.76) [N1204]
C12Y305/01077 . . N-Carbamoyl-D-amino-acid hydrolase (3.5.1.77) [N1202]
C12Y305/01078 . . Glutathionylspermidine amidase (3.5.1.78) [N1204]
C12Y305/01079 . . Phthalyl amidase (3.5.1.79) [N1204]
C12Y305/01081 . . N-Acyl-D-amino-acid deacylase (3.5.1.81) [N1204]
C12Y305/01082 . . N-Acyl-D-glutamate deacylase (3.5.1.82) [N1204]
C12Y305/01083 . . N-Acyl-D-aspartate deacylase (3.5.1.83) [N1204]
C12Y305/01084 . . Biuret amidohydrolase (3.5.1.84) [N1204]
C12Y305/01085 . . (S)-N-Acetyl-1-phenylethylamine hydrolase (3.5.1.85) [N1204]
C12Y305/01086 . . Mandelamide amidase (3.5.1.86) [N1204]
C12Y305/01087 . . N-Carbamoyl-L-amino-acid hydrolase (3.5.1.87) [N1204]
C12Y305/01088 . . Peptide deformylase (3.5.1.88) [N1202]
C12Y305/01089 . . N-Acetylglucosaminylphosphatidylinositol deacetylase (3.5.1.89) [N1204]
C12Y305/01090 . . Adenosylcobinamide hydrolase (3.5.1.90) [N1204]
C12Y305/01091 . . N-Substituted formamide deformylase (3.5.1.91) [N1204]
C12Y305/01092 . . Pantetheine hydrolase (3.5.1.92) [N1204]
C12Y305/01093 . . Glutaryl-7-aminocephalosporanic-acid acylase (3.5.1.93) [N1204]
C12Y305/01094 . . Gamma-glutamyl-gamma-aminobutyrate hydrolase (3.5.1.94) [N1204]
C12Y305/01095 . . N-Malonylurea hydrolase (3.5.1.95) [N1204]
C12Y305/01096 . . Succinylglutamate desuccinylase (3.5.1.96) [N1204]
C12Y305/01097 . . Acyl-homoserine-lactone acylase (3.5.1.97) [N1204]
C12Y305/01098 . . Histone deacetylase (3.5.1.98), i.e. sirtuin deacetylase [N1202]
C12Y305/01099 . . Fatty acid amide hydrolase (3.5.1.99) [N1204]
C12Y305/01100 . . (R)-Amidase (3.5.1.100) [N1204]
C12Y305/01101 . . L-Proline amide hydrolase (3.5.1.101) [N1204]
C12Y305/01102 . . 2-Amino-5-formylamino-6-ribosylaminopyrimidin-4(3H)-one 5'-monophosphate deformylase (3.5.1.102) [N1204]
C12Y305/01103 . . N-Acetyl-1-D-myo-inositol-2-amino-2-deoxy-alpha-D-glucopyranoside deacetylase (3.5.1.103) [N1204]
C12Y305/01104 . . Peptidoglycan-N-acetylglucosamine deacetylase (3.5.1.104) [N1202]
C12Y305/01105 . . Chitin disaccharide deacetylase (3.5.1.105) [N1204]
C12Y305/01106 . . N-formylmaleamate deformylase (3.5.1.106) [N1204]
C12Y305/01107 . . Maleamate amidohydrolase (3.5.1.107) [N1204]
C12Y305/01108 . . UDP-3-O-acyl-N-acetylglucosamine deacetylase (3.5.1.108) [N1204]
C12Y305/01109 . . Sphingomyelin deacylase (3.5.1.109) [N1204]

C12Y305/02 . in cyclic amides (3.5.2) [N1202]
C12Y305/02001 . . Barbiturase (3.5.2.1) [N1204]
C12Y305/02002 . . Dihydropyrimidinase (3.5.2.2), i.e. hydantoinase [N1202]
C12Y305/02003 . . Dihydroorotase (3.5.2.3) [N1202]

C12Y305/02004 . . Carboxymethylhydantoinase (3.5.2.4) [N1204]
C12Y305/02005 . . Allantoinase (3.5.2.5) [N1204]
C12Y305/02006 . . Beta-lactamase (3.5.2.6) [N1202]
C12Y305/02007 . . Imidazolonepropionase (3.5.2.7) [N1204]
C12Y305/02009 . . 5-Oxoprolinase (ATP-hydrolysing) (3.5.2.9) [N1202]
C12Y305/02010 . . Creatininase (3.5.2.10) [N1204]
C12Y305/02011 . . L-Lysine-lactamase (3.5.2.11) [N1204]
C12Y305/02012 . . 6-Aminohexanoate-cyclic-dimer hydrolase (3.5.2.12) [N1204]
C12Y305/02013 . . 2,5-Dioxopiperazine hydrolase (3.5.2.13) [N1204]
C12Y305/02014 . . N-Methylhydantoinase (ATP-hydrolyzing) (3.5.2.14) [N1204]
C12Y305/02015 . . Cyanuric acid amidohydrolase (3.5.2.15) [N1204]
C12Y305/02016 . . Maleimide hydrolase (3.5.2.16) [N1204]
C12Y305/02017 . . Hydroxyisourate hydrolase (3.5.2.17) [N1204]
C12Y305/02018 . . Enamidase (3.5.2.18) [N1204]
C12Y305/02019 . . Streptothricin hydrolase (3.5.2.19) [N1204]

C12Y305/03 . in linear amidines (3.5.3) [N1202]
C12Y305/03001 . . Arginase (3.5.3.1) [N1202]
C12Y305/03002 . . Guanidinoacetase (3.5.3.2) [N1204]
C12Y305/03003 . . Creatinase (3.5.3.3), i.e. creatine amidinohydrolase [N1202]
C12Y305/03004 . . Allantoicase (3.5.3.4) [N1204]
C12Y305/03005 . . Formimidoylaspartate deiminase (3.5.3.5) [N1204]
C12Y305/03006 . . Arginine deiminase (3.5.3.6) [N1202]
C12Y305/03007 . . Guanidinobutyrase (3.5.3.7) [N1204]
C12Y305/03008 . . Formimidoylglutamase (3.5.3.8) [N1204]
C12Y305/03009 . . Allantoate deiminase (3.5.3.9) [N1204]
C12Y305/03010 . . D-Arginase (3.5.3.10) [N1204]
C12Y305/03011 . . Agmatinase (3.5.3.11) [N1204]
C12Y305/03012 . . Agmatine deiminase (3.5.3.12) [N1204]
C12Y305/03013 . . Formimidoylglutamate deiminase (3.5.3.13) [N1204]
C12Y305/03014 . . Amidinoaspartase (3.5.3.14) [N1204]
C12Y305/03015 . . Protein-arginine deiminase (3.5.3.15) [N1202]
C12Y305/03016 . . Methylguanidinase (3.5.3.16) [N1204]
C12Y305/03017 . . Guanidinopropionase (3.5.3.17) [N1204]
C12Y305/03018 . . Dimethylargininase (3.5.3.18) [N1202]
C12Y305/03019 . . Ureidoglycolate hydrolase (3.5.3.19) [N1204]
C12Y305/03020 . . Diguanidinobutanase (3.5.3.20) [N1204]
C12Y305/03021 . . Methylenediurea deaminase (3.5.3.21) [N1204]
C12Y305/03022 . . Proclavaminate amidinohydrolase (3.5.3.22) [N1204]
C12Y305/03023 . . N-Succinylarginine dihydrolase (3.5.3.23) [N1204]

C12Y305/04 . in cyclic amidines (3.5.4) [N1202]
C12Y305/04001 . . Cytosine deaminase (3.5.4.1) [N1202]

C12Y305/04002 . . Adenine deaminase (3.5.4.2) [N1204]
C12Y305/04003 . . Guanine deaminase (3.5.4.3) [N1204]
C12Y305/04004 . . Adenosine deaminase (3.5.4.4) [N1202]
C12Y305/04005 . . Cytidine deaminase (3.5.4.5) [N1202]
C12Y305/04006 . . AMP deaminase (3.5.4.6) [N1204]
C12Y305/04007 . . ADP deaminase (3.5.4.7) [N1204]
C12Y305/04008 . . Aminoimidazolase (3.5.4.8) [N1204]
C12Y305/04009 . . Methenyltetrahydrofolate cyclohydrolase (3.5.4.9) [N1204]
C12Y305/04010 . . IMP cyclohydrolase (3.5.4.10) [N1204]
C12Y305/04011 . . Pterin deaminase (3.5.4.11) [N1204]
C12Y305/04012 . . dCMP deaminase (3.5.4.12) [N1204]
C12Y305/04013 . . dCTP deaminase (3.5.4.13) [N1204]
C12Y305/04014 . . Deoxycytidine deaminase (3.5.4.14) [N1202]
C12Y305/04015 . . Guanosine deaminase (3.5.4.15) [N1204]
C12Y305/04016 . . GTP cyclohydrolase I (3.5.4.16) [N1202]
C12Y305/04017 . . Adenosine-phosphate deaminase (3.5.4.17) [N1204]
C12Y305/04018 . . ATP deaminase (3.5.4.18) [N1204]
C12Y305/04019 . . Phosphoribosyl-AMP cyclohydrolase (3.5.4.19) [N1204]
C12Y305/04020 . . Pyrithiamine deaminase (3.5.4.20) [N1204]
C12Y305/04021 . . Creatinine deaminase (3.5.4.21) [N1202]
C12Y305/04022 . . 1-Pyrroline-4-hydroxy-2-carboxylate deaminase (3.5.4.22) [N1204]
C12Y305/04023 . . Blasticidin-S deaminase (3.5.4.23) [N1204]
C12Y305/04024 . . Sepiapterin deaminase (3.5.4.24) [N1204]
C12Y305/04025 . . GTP cyclohydrolase II (3.5.4.25) [N1202]
C12Y305/04026 . . Diaminohydroxyphosphoribosylaminopyrimidine deaminase (3.5.4.26) [N1204]
C12Y305/04027 . . Methenyltetrahydromethanopterin cyclohydrolase (3.5.4.27) [N1204]
C12Y305/04028 . . S-Adenosylhomocysteine deaminase (3.5.4.28) [N1204]
C12Y305/04029 . . GTP cyclohydrolase IIa (3.5.4.29) [N1204]
C12Y305/04030 . . dCTP deaminase (dUMP-forming) (3.5.4.30) [N1204]
C12Y305/04031 . . S-Methyl-5'-thioadenosine deaminase (3.5.4.31) [N1204]

C12Y305/05 . in nitriles (3.5.5) [N1202]
C12Y305/05001 . . Nitrilase (3.5.5.1) [N1202]
C12Y305/05002 . . Ricinine nitrilase (3.5.5.2) [N1204]
C12Y305/05004 . . Cyanoalanine nitrilase (3.5.5.4) [N1204]
C12Y305/05005 . . Arylacetonitrilase (3.5.5.5) [N1204]
C12Y305/05006 . . Bromoxynil nitrilase (3.5.5.6) [N1204]
C12Y305/05007 . . Aliphatic nitrilase (3.5.5.7) [N1204]
C12Y305/05008 . . Thiocyanate hydrolase (3.5.5.8) [N1204]

C12Y305/99 . in other compounds (3.5.99) [N1202]
C12Y305/99001 . . Riboflavinase (3.5.99.1) [N1204]
C12Y305/99002 . . Thiaminase (3.5.99.2) [N1202]

C12Y305/99003 . . Hydroxydechloroatrazine ethylaminohydrolase (3.5.99.3) [N1204]
C12Y305/99004 . . N-isopropylammelide isopropylaminohydrolase (3.5.99.4) [N1204]
C12Y305/99005 . . 2-Aminomuconate deaminase (3.5.99.5) [N1204]
C12Y305/99006 . . Glucosamine-6-phosphate deaminase (3.5.99.6) [N1202]
C12Y305/99007 . . 1-Aminocyclopropane-1-carboxylate deaminase (3.5.99.7) [N1204]
C12Y305/99008 . . 5-Nitroanthranilic acid aminohydrolase (3.5.99.8) [N1204]

C12Y306/00 Hydrolases acting on acid anhydrides (3.6) [N1202]

C12Y306/01 . in phosphorus-containing anhydrides (3.6.1) [N1202]
C12Y306/01001 . . Inorganic diphosphatase (3.6.1.1) [N1202]
C12Y306/01002 . . Trimetaphosphatase (3.6.1.2) [N1204]
C12Y306/01003 . . Adenosine triphosphatase (3.6.1.3) [N1202]
C12Y306/01005 . . Apyrase (3.6.1.5), i.e. ATP diphosphohydrolase [N1202]
C12Y306/01006 . . Nucleoside-diphosphatase (3.6.1.6) [N1204]
C12Y306/01007 . . Acylphosphatase (3.6.1.7) [N1204]
C12Y306/01008 . . ATP diphosphatase (3.6.1.8) [N1204]
C12Y306/01009 . . Nucleotide diphosphatase (3.6.1.9), i.e. nucleotide-pyrophosphatase [N1202]
C12Y306/01010 . . Endopolyphosphatase (3.6.1.10) [N1204]
C12Y306/01011 . . Exopolyphosphatase (3.6.1.11) [N1202]
C12Y306/01012 . . dCTP diphosphatase (3.6.1.12) [N1204]
C12Y306/01013 . . ADP-ribose diphosphatase (3.6.1.13) [N1204]
C12Y306/01014 . . Adenosine-tetraphosphatase (3.6.1.14) [N1204]
C12Y306/01015 . . Nucleoside-triphosphatase (3.6.1.15) [N1202]
C12Y306/01016 . . CDP-glycerol diphosphatase (3.6.1.16) [N1204]
C12Y306/01017 . . Bis(5'-nucleosyl)-tetraphosphatase (asymmetrical) (3.6.1.17) [N1204]
C12Y306/01018 . . FAD diphosphatase (3.6.1.18) [N1204]
C12Y306/01019 . . Nucleoside-triphosphate diphosphatase (3.6.1.19) [N1204]
C12Y306/01020 . . 5'-Acylphosphoadenosine hydrolase (3.6.1.20) [N1204]
C12Y306/01021 . . ADP-sugar diphosphatase (3.6.1.21) [N1204]
C12Y306/01022 . . NAD+ diphosphatase (3.6.1.22) [N1204]
C12Y306/01023 . . dUTP diphosphatase (3.6.1.23) [N1202]
C12Y306/01024 . . Nucleoside phosphoacylhydrolase (3.6.1.24) [N1204]
C12Y306/01025 . . Triphosphatase (3.6.1.25) [N1204]
C12Y306/01026 . . CDP-diacylglycerol diphosphatase (3.6.1.26) [N1204]
C12Y306/01027 . . Undecaprenyl-diphosphatase (3.6.1.27) [N1204]
C12Y306/01028 . . Thiamine-triphosphatase (3.6.1.28) [N1204]
C12Y306/01029 . . Bis(5'-adenosyl)-triphosphatase (3.6.1.29) [N1204]
C12Y306/01030 . . M7G(5')pppN diphosphatase (3.6.1.30) [N1204]
C12Y306/01031 . . Phosphoribosyl-ATP diphosphatase (3.6.1.31) [N1204]
C12Y306/01039 . . Thymidine-triphosphatase (3.6.1.39), i.e. T4 helicase [N1202]
C12Y306/01040 . . Guanosine-5'-triphosphate,3'-diphosphate diphosphatase (3.6.1.40) [N1204]

C12Y306/01041 . . Bis(5'-nucleosyl)-tetraphosphatase (symmetrical) (3.6.1.41) [N1204]
C12Y306/01042 . . Guanosine-diphosphatase (3.6.1.42) [N1204]
C12Y306/01043 . . Dolichyldiphosphatase (3.6.1.43) [N1204]
C12Y306/01044 . . Oligosaccharide-diphosphodolichol diphosphatase (3.6.1.44) [N1204]
C12Y306/01045 . . UDP-sugar diphosphatase (3.6.1.45) [N1204]
C12Y306/01052 . . Diphosphoinositol-polyphosphate diphosphatase (3.6.1.52) [N1204]
C12Y306/01053 . . Mn2+-dependent ADP-ribose/CDP-alcohol diphosphatase (3.6.1.53) [N1204]
C12Y306/01054 . . UDP-2,3-diacylglucosamine diphosphatase (3.6.1.54) [N1204]
C12Y306/01055 . . 8-Oxo-dGTP diphosphatase (3.6.1.55) [N1204]
C12Y306/01056 . . 2-Hydroxy-dATP diphosphatase (3.6.1.56) [N1204]
C12Y306/01057 . . UDP-2,4-diacetamido-2,4,6-trideoxy-beta-L-altropyranose hydrolase (3.6.1.57) [N1204]

C12Y306/02 . in sulfonyl-containing anhydrides (3.6.2) [N1204]
C12Y306/02001 . . Adenylylsulfatase (3.6.2.1) [N1204]
C12Y306/02002 . . Phosphoadenylylsulfatase (3.6.2.2) [N1204]

C12Y306/03 . acting on acid anhydrides; catalysing transmembrane movement of substances (3.6.3) [N1202]
C12Y306/03001 . . Phospholipid-translocating ATPase (3.6.3.1), i.e Mg2+-ATPase [N1204]
C12Y306/03002 . . Mg2+-importing ATPase (3.6.3.2) [N1204]
C12Y306/03003 . . Cd2+-exporting ATPase (3.6.3.3) [N1204]
C12Y306/03004 . . Cu2+-exporting ATPase (3.6.3.4) [N1204]
C12Y306/03005 . . Zn2+-exporting ATPase (3.6.3.5) [N1204]
C12Y306/03006 . . H+-exporting ATPase (3.6.3.6) [N1204]
C12Y306/03007 . . Na+-exporting ATPase (3.6.3.7) [N1204]
C12Y306/03008 . . Ca2+-transporting ATPase (3.6.3.8) [N1202]
C12Y306/03009 . . Na+/K+-exchanging ATPase (3.6.3.9) [N1202]
C12Y306/03010 . . H+/K+-exchanging ATPase (3.6.3.10) [N1202]
C12Y306/03011 . . Cl--transporting ATPase (3.6.3.11) [N1204]
C12Y306/03012 . . K+-transporting ATPase (3.6.3.12) [N1204]
C12Y306/03014 . . H+-transporting two-sector ATPase (3.6.3.14), i.e. F1 ATPase [N1202]
C12Y306/03015 . . Na+-transporting two-sector ATPase (3.6.3.15) [N1204]
C12Y306/03016 . . Arsenite-transporting ATPase (3.6.3.16) [N1204]
C12Y306/03017 . . Monosaccharide-transporting ATPase (3.6.3.17) [N1204]
C12Y306/03018 . . Oligosaccharide-transporting ATPase (3.6.3.18) [N1204]
C12Y306/03019 . . Maltose-transporting ATPase (3.6.3.19) [N1204]
C12Y306/03020 . . Glycerol-3-phosphate-transporting ATPase (3.6.3.20) [N1204]
C12Y306/03021 . . Polar-amino-acid-transporting ATPase (3.6.3.21) [N1204]
C12Y306/03022 . . Nonpolar-amino-acid-transporting ATPase (3.6.3.22) [N1204]
C12Y306/03023 . . Oligopeptide-transporting ATPase (3.6.3.23) [N1204]
C12Y306/03024 . . Nickel-transporting ATPase (3.6.3.24) [N1204]
C12Y306/03025 . . Sulfate-transporting ATPase (3.6.3.25) [N1204]

C12Y306/03026 . . Nitrate-transporting ATPase (3.6.3.26) [N1204]
C12Y306/03027 . . Phosphate-transporting ATPase (3.6.3.27) [N1204]
C12Y306/03028 . . Phosphonate-transporting ATPase (3.6.3.28) [N1204]
C12Y306/03029 . . Molybdate-transporting ATPase (3.6.3.29) [N1204]
C12Y306/03030 . . Fe3+-transporting ATPase (3.6.3.30) [N1204]
C12Y306/03031 . . Polyamine-transporting ATPase (3.6.3.31) [N1204]
C12Y306/03032 . . Quaternary-amine-transporting ATPase (3.6.3.32) [N1204]
C12Y306/03033 . . Vitamin B12-transporting ATPase (3.6.3.33) [N1204]
C12Y306/03034 . . Iron-chelate-transporting ATPase (3.6.3.34) [N1204]
C12Y306/03035 . . Manganese-transporting ATPase (3.6.3.35) [N1204]
C12Y306/03036 . . Taurine-transporting ATPase (3.6.3.36) [N1204]
C12Y306/03037 . . Guanine-transporting ATPase (3.6.3.37) [N1204]
C12Y306/03038 . . Capsular-polysaccharide-transporting ATPase (3.6.3.38) [N1204]
C12Y306/03039 . . Lipopolysaccharide-transporting ATPase (3.6.3.39) [N1204]
C12Y306/03040 . . Teichoic-acid-transporting ATPase (3.6.3.40) [N1204]
C12Y306/03041 . . Heme-transporting ATPase (3.6.3.41) [N1204]
C12Y306/03042 . . Beta-glucan-transporting ATPase (3.6.3.42) [N1204]
C12Y306/03043 . . Peptide-transporting ATPase (3.6.3.43) [N1204]
C12Y306/03044 . . Xenobiotic-transporting ATPase (3.6.3.44) [N1202]
C12Y306/03046 . . Cadmium-transporting ATPase (3.6.3.46) [N1204]
C12Y306/03047 . . Fatty-acyl-CoA-transporting ATPase (3.6.3.47) [N1204]
C12Y306/03048 . . Alpha-factor-transporting ATPase (3.6.3.48) [N1204]
C12Y306/03049 . . Channel-conductance-controlling ATPase (3.6.3.49) [N1204]
C12Y306/03050 . . Protein-secreting ATPase (3.6.3.50) [N1204]
C12Y306/03051 . . Mitochondrial protein-transporting ATPase (3.6.3.51) [N1204]
C12Y306/03052 . . Chloroplast protein-transporting ATPase (3.6.3.52) [N1204]
C12Y306/03053 . . Ag+-exporting ATPase (3.6.3.53) [N1204]

C12Y306/04 . acting on acid anhydrides; involved in cellular and subcellular movement (3.6.4) [N1202]
C12Y306/04001 . . Myosin ATPase (3.6.4.1) [N1204]
C12Y306/04002 . . Dynein ATPase (3.6.4.2) [N1204]
C12Y306/04003 . . Microtubule-severing ATPase (3.6.4.3) [N1204]
C12Y306/04004 . . Plus-end-directed kinesin ATPase (3.6.4.4) [N1204]
C12Y306/04005 . . Minus-end-directed kinesin ATPase (3.6.4.5) [N1204]
C12Y306/04006 . . Vesicle-fusing ATPase (3.6.4.6) [N1202]
C12Y306/04007 . . Peroxisome-assembly ATPase (3.6.4.7) [N1204]
C12Y306/04008 . . Proteasome ATPase (3.6.4.8) [N1204]
C12Y306/04009 . . Chaperonin ATPase (3.6.4.9) [N1204]
C12Y306/04010 . . Non-chaperonin molecular chaperone ATPase (3.6.4.10) [N1204]
C12Y306/04011 . . Nucleoplasmin ATPase (3.6.4.11) [N1204]
C12Y306/04012 . . DNA helicase (3.6.4.12) [N1202]
C12Y306/04013 . . RNA helicase (3.6.4.13) [N1202]

C12Y306/05 . acting on GTP; involved in cellular and subcellular movement (3.6.5) [N1202]
C12Y306/05001 . . Heterotrimeric G-protein GTPase (3.6.5.1) [N1204]
C12Y306/05002 . . Small monomeric GTPase (3.6.5.2) [N1202]
C12Y306/05003 . . Protein-synthesizing GTPase (3.6.5.3) [N1204]
C12Y306/05004 . . Signal-recognition-particle GTPase (3.6.5.4) [N1204]
C12Y306/05005 . . Dynamin GTPase (3.6.5.5) [N1204]
C12Y306/05006 . . Tubulin GTPase (3.6.5.6) [N1204]

C12Y307/00 Hydrolases acting on carbon-carbon bonds (3.7) [N1202]

C12Y307/01 . in ketonic substances (3.7.1) [N1202]
C12Y307/01001 . . Oxaloacetase (3.7.1.1) [N1204]
C12Y307/01002 . . Fumarylacetoacetase (3.7.1.2) [N1202]
C12Y307/01003 . . Kynureninase (3.7.1.3) [N1204]
C12Y307/01004 . . Phloretin hydrolase (3.7.1.4) [N1204]
C12Y307/01005 . . Acylpyruvate hydrolase (3.7.1.5) [N1204]
C12Y307/01006 . . Acetylpyruvate hydrolase (3.7.1.6) [N1204]
C12Y307/01007 . . Beta-diketone hydrolase (3.7.1.7) [N1204]
C12Y307/01008 . . 2,6-Dioxo-6-phenylhexa-3-enoate hydrolase (3.7.1.8) [N1204]
C12Y307/01009 . . 2-Hydroxymuconate-semialdehyde hydrolase (3.7.1.9) [N1204]
C12Y307/01010 . . Cyclohexane-1,3-dione hydrolase (3.7.1.10) [N1204]
C12Y307/01011 . . Cyclohexane-1,2-dione hydrolase (3.7.1.11) [N1204]
C12Y307/01012 . . Cobalt-precorrin 5A hydrolase (3.7.1.12) [N1204]
C12Y307/01013 . . 2-Hydroxy-6-oxo-6-(2-aminophenyl)hexa-2,4-dienoate hydrolase (3.7.1.13) [N1204]
C12Y307/01014 . . 2-Hydroxy-6-oxonona-2,4-dienedioate hydrolase (3.7.1.14) [N1204]
C12Y307/01015 . . (+)-Caryolan-1-ol synthase (3.7.1.15) [N1204]
C12Y307/01016 . . Oxepin-CoA hydrolase (3.7.1.16) [N1204]

C12Y308/00 Hydrolases acting on halide bonds (3.8) [N1202]

C12Y308/01 . in C-halide substances (3.8.1) [N1202]
C12Y308/01001 . . Alkylhalidase (3.8.1.1) [N1204]
C12Y308/01002 . . (S)-2-Haloacid dehalogenase (3.8.1.2) [N1202]
C12Y308/01003 . . Haloacetate dehalogenase (3.8.1.3) [N1202]
C12Y308/01005 . . Haloalkane dehalogenase (3.8.1.5) [N1202]
C12Y308/01006 . . 4-Chlorobenzoate dehalogenase (3.8.1.6) [N1204]
C12Y308/01007 . . 4-Chlorobenzoyl-CoA dehalogenase (3.8.1.7) [N1204]
C12Y308/01008 . . Atrazine chlorohydrolase (3.8.1.8) [N1204]
C12Y308/01009 . . (R)-2-Haloacid dehalogenase (3.8.1.9) [N1204]
C12Y308/01010 . . 2-Haloacid dehalogenase (configuration-inverting) (3.8.1.10) [N1204]
C12Y308/01011 . . 2-Haloacid dehalogenase (configuration-retaining) (3.8.1.11) [N1204]

C12Y309/00 Hydrolases acting on phosphorus-nitrogen bonds (3.9) [N1202]

C12Y309/01 . acting on phosphorus-nitrogen bonds (3.9.1) [N1204]
C12Y309/01001 . . Phosphoamidase (3.9.1.1) [N1204]

C12Y310/00 Hydrolases acting on sulfur-nitrogen bonds (3.10) [N1202]

C12Y310/01 . acting on sulfur-nitrogen bonds (3.10.1) [N1204]
C12Y310/01001 . . N-Sulfoglucosamine sulfohydrolase (3.10.1.1) [N1204]
C12Y310/01002 . . Cyclamate sulfohydrolase (3.10.1.2) [N1204]

C12Y311/00 Hydrolases acting on carbon-phosphorus bonds (3.11) [N1202]

C12Y311/01 . acting on carbon-phosphorus bonds (3.11.1) [N1204]
C12Y311/01001 . . Phosphonoacetaldehyde hydrolase (3.11.1.1) [N1204]
C12Y311/01002 . . Phosphonoacetate hydrolase (3.11.1.2) [N1204]
C12Y311/01003 . . Phosphonopyruvate hydrolase (3.11.1.3) [N1204]

C12Y312/00 Hydrolases acting on sulfur-sulfur bonds (3.12) [N1202]

C12Y312/01 . acting on sulfur-sulfur bonds (3.12.1) [N1204]
C12Y312/01001 . . Trithionate hydrolase (3.12.1.1) [N1204]

C12Y313/00 Hydrolases acting on carbon-sulfur bonds (3.13) [N1202]

C12Y313/01 . acting on carbon-sulfur bonds (3.13.1) [N1204]
C12Y313/01001 . . UDP-sulfoquinovose synthase (3.13.1.1) [N1204]
C12Y313/01003 . . 2'-Hydroxybiphenyl-2-sulfinate desulfinase (3.13.1.3) [N1204]

C12Y401/00 Carbon-carbon lyases (4.1) [N1202]

C12Y401/01 . Carboxy-lyases (4.1.1) [N1202]
C12Y401/01001 . . Pyruvate decarboxylase (4.1.1.1) [N1202]
C12Y401/01002 . . Oxalate decarboxylase (4.1.1.2) [N1202]
C12Y401/01003 . . Oxaloacetate decarboxylase (4.1.1.3) [N1204]
C12Y401/01004 . . Acetoacetate decarboxylase (4.1.1.4) [N1204]
C12Y401/01005 . . Acetolactate decarboxylase (4.1.1.5) [N1202]
C12Y401/01006 . . Aconitate decarboxylase (4.1.1.6) [N1204]
C12Y401/01007 . . Benzoylformate decarboxylase (4.1.1.7) [N1204]
C12Y401/01008 . . Oxalyl-CoA decarboxylase (4.1.1.8) [N1204]
C12Y401/01009 . . Malonyl-CoA decarboxylase (4.1.1.9) [N1202]
C12Y401/01011 . . Aspartate 1-decarboxylase (4.1.1.11) [N1202]
C12Y401/01012 . . Aspartate 4-decarboxylase (4.1.1.12) [N1204]
C12Y401/01014 . . Valine decarboxylase (4.1.1.14) [N1204]

C12Y401/01015 . . Glutamate decarboxylase (4.1.1.15) [N1202]
C12Y401/01016 . . Hydroxyglutamate decarboxylase (4.1.1.16) [N1204]
C12Y401/01017 . . Ornithine decarboxylase (4.1.1.17) [N1202]
C12Y401/01018 . . Lysine decarboxylase (4.1.1.18) [N1202]
C12Y401/01019 . . Arginine decarboxylase (4.1.1.19) [N1202]
C12Y401/01020 . . Diaminopimelate decarboxylase (4.1.1.20) [N1204]
C12Y401/01021 . . Phosphoribosylaminoimidazole carboxylase (4.1.1.21) [N1202]
C12Y401/01022 . . Histidine decarboxylase (4.1.1.22) [N1202]
C12Y401/01023 . . Orotidine-5'-phosphate decarboxylase (4.1.1.23) [N1202]
C12Y401/01024 . . Aminobenzoate decarboxylase (4.1.1.24) [N1204]
C12Y401/01025 . . Tyrosine decarboxylase (4.1.1.25) [N1202]
C12Y401/01028 . . Aromatic-L-amino-acid decarboxylase (4.1.1.28), i.e. tryptophane-decarboxylase [N1202]
C12Y401/01029 . . Sulfinoalanine decarboxylase (4.1.1.29) [N1204]
C12Y401/01030 . . Pantothenoylcysteine decarboxylase (4.1.1.30) [N1204]
C12Y401/01031 . . Phosphoenolpyruvate carboxylase (4.1.1.31) [N1202]
C12Y401/01032 . . Phosphoenolpyruvate carboxykinase (GTP) (4.1.1.32) [N1202]
C12Y401/01033 . . Diphosphomevalonate decarboxylase (4.1.1.33), i.e. mevalonate-pyrophosphate decarboxylase [N1202]
C12Y401/01034 . . Dehydro-L-gulonate decarboxylase (4.1.1.34) [N1204]
C12Y401/01035 . . UDP-glucuronate decarboxylase (4.1.1.35), i.e. UDP-D-xylose synthase [N1202]
C12Y401/01036 . . Phosphopantothenoylcysteine decarboxylase (4.1.1.36) [N1204]
C12Y401/01037 . . Uroporphyrinogen decarboxylase (4.1.1.37) [N1204]
C12Y401/01038 . . Phosphoenolpyruvate carboxykinase (diphosphate) (4.1.1.38) [N1204]
C12Y401/01039 . . Ribulose-bisphosphate carboxylase (4.1.1.39) [N1202]
C12Y401/01040 . . Hydroxypyruvate decarboxylase (4.1.1.40) [N1204]
C12Y401/01041 . . Methylmalonyl-CoA decarboxylase (4.1.1.41) [N1204]
C12Y401/01042 . . Carnitine decarboxylase (4.1.1.42) [N1204]
C12Y401/01043 . . Phenylpyruvate decarboxylase (4.1.1.43) [N1204]
C12Y401/01044 . . 4-Carboxymuconolactone decarboxylase (4.1.1.44) [N1204]
C12Y401/01045 . . Aminocarboxymuconate-semialdehyde decarboxylase (4.1.1.45) [N1204]
C12Y401/01046 . . o-Pyrocatechuate decarboxylase (4.1.1.46) [N1202]
C12Y401/01047 . . Tartronate-semialdehyde synthase (4.1.1.47) [N1204]
C12Y401/01048 . . Indole-3-glycerol-phosphate synthase (4.1.1.48) [N1202]
C12Y401/01049 . . Phosphoenolpyruvate carboxykinase (ATP) (4.1.1.49) [N1204]
C12Y401/01050 . . Adenosylmethionine decarboxylase (4.1.1.50) [N1202]
C12Y401/01051 . . 3-Hydroxy-2-methylpyridine-4,5-dicarboxylate 4-decarboxylase (4.1.1.51) [N1204]
C12Y401/01052 . . 6-Methylsalicylate decarboxylase (4.1.1.52) [N1204]
C12Y401/01053 . . Phenylalanine decarboxylase (4.1.1.53) [N1202]
C12Y401/01054 . . Dihydroxyfumarate decarboxylase (4.1.1.54) [N1204]
C12Y401/01055 . . 4,5-Dihydroxyphthalate decarboxylase (4.1.1.55) [N1204]
C12Y401/01056 . . 3-Oxolaurate decarboxylase (4.1.1.56) [N1204]
C12Y401/01057 . . Methionine decarboxylase (4.1.1.57) [N1204]

C12Y401/01058 . . Orsellinate decarboxylase (4.1.1.58) [N1204]
C12Y401/01059 . . Gallate decarboxylase (4.1.1.59) [N1204]
C12Y401/01060 . . Stipitatonate decarboxylase (4.1.1.60) [N1204]
C12Y401/01061 . . 4-Hydroxybenzoate decarboxylase (4.1.1.61) [N1204]
C12Y401/01062 . . Gentisate decarboxylase (4.1.1.62) [N1204]
C12Y401/01063 . . Protocatechuate decarboxylase (4.1.1.63) [N1204]
C12Y401/01064 . . 2,2-Dialkylglycine decarboxylase (pyruvate) (4.1.1.64) [N1204]
C12Y401/01065 . . Phosphatidylserine decarboxylase (4.1.1.65) [N1204]
C12Y401/01066 . . Uracil-5-carboxylate decarboxylase (4.1.1.66) [N1204]
C12Y401/01067 . . UDP-galacturonate decarboxylase (4.1.1.67) [N1204]
C12Y401/01068 . . 5-Oxopent-3-ene-1,2,5-tricarboxylate decarboxylase (4.1.1.68) [N1204]
C12Y401/01069 . . 3,4-Dihydroxyphthalate decarboxylase (4.1.1.69) [N1204]
C12Y401/01070 . . Glutaconyl-CoA decarboxylase (4.1.1.70) [N1202]
C12Y401/01071 . . 2-Oxoglutarate decarboxylase (4.1.1.71) [N1204]
C12Y401/01072 . . Branched-chain-2-oxoacid decarboxylase (4.1.1.72) [N1204]
C12Y401/01073 . . Tartrate decarboxylase (4.1.1.73) [N1204]
C12Y401/01074 . . Indolepyruvate decarboxylase (4.1.1.74) [N1204]
C12Y401/01075 . . 5-Guanidino-2-oxopentanoate decarboxylase (4.1.1.75) [N1204]
C12Y401/01076 . . Arylmalonate decarboxylase (4.1.1.76) [N1202]
C12Y401/01077 . . 4-Oxalocrotonate decarboxylase (4.1.1.77) [N1204]
C12Y401/01078 . . Acetylenedicarboxylate decarboxylase (4.1.1.78) [N1204]
C12Y401/01079 . . Sulfopyruvate decarboxylase (4.1.1.79) [N1204]
C12Y401/01080 . . 4-Hydroxyphenylpyruvate decarboxylase (4.1.1.80) [N1204]
C12Y401/01081 . . Threonine-phosphate decarboxylase (4.1.1.81) [N1204]
C12Y401/01082 . . Phosphonopyruvate decarboxylase (4.1.1.82) [N1204]
C12Y401/01083 . . 4-Hydroxyphenylacetate decarboxylase (4.1.1.83) [N1204]
C12Y401/01084 . . D-Dopachrome decarboxylase (4.1.1.84) [N1204]
C12Y401/01085 . . 3-Dehydro-L-gulonate-6-phosphate decarboxylase (4.1.1.85) [N1204]
C12Y401/01086 . . Diaminobutyrate decarboxylase (4.1.1.86) [N1204]
C12Y401/01087 . . Malonyl-S-ACP decarboxylase (4.1.1.87) [N1204]
C12Y401/01088 . . Biotin-independent malonate decarboxylase (4.1.1.88) [N1204]
C12Y401/01089 . . Biotin-dependent malonate decarboxylase (4.1.1.89) [N1204]
C12Y401/01090 . . Peptidyl-glutamate 4-carboxylase (4.1.1.90) [N1204]
C12Y401/01091 . . Salicylate decarboxylase (4.1.1.91) [N1204]
C12Y401/01092 . . Indole-3-carboxylate decarboxylase (4.1.1.92) [N1204]
C12Y401/01093 . . Pyrrole-2-carboxylate decarboxylase (4.1.1.93) [N1204]

C12Y401/02 . Aldehyde-lyases (4.1.2) [N1202]
C12Y401/02002 . . Ketotetrose-phosphate aldolase (4.1.2.2) [N1204]
C12Y401/02004 . . Deoxyribose-phosphate aldolase (4.1.2.4) [N1204]
C12Y401/02005 . . L-Threonine aldolase (4.1.2.5) [N1204]
C12Y401/02008 . . Indole-3-glycerol-phosphate lyase (4.1.2.8) [N1204]

C12Y401/02009 . . Phosphoketolase (4.1.2.9) [N1202]
C12Y401/02010 . . (R)-Mandelonitrile lyase (4.1.2.10) [N1202]
C12Y401/02011 . . Hydroxymandelonitrile lyase (4.1.2.11) [N1202]
C12Y401/02012 . . 2-Dehydropantoate aldolase (4.1.2.12), i.e. ketopantoaldolase [N1204]
C12Y401/02013 . . Fructose-bisphosphate aldolase (4.1.2.13) [N1202]
C12Y401/02014 . . 2-Dehydro-3-deoxy-phosphogluconate aldolase (4.1.2.14) [N1202]
C12Y401/02017 . . L-Fuculose-phosphate aldolase (4.1.2.17) [N1204]
C12Y401/02018 . . 2-Dehydro-3-deoxy-L-pentonate aldolase (4.1.2.18) [N1204]
C12Y401/02019 . . Rhamnulose-1-phosphate aldolase (4.1.2.19) [N1204]
C12Y401/02020 . . 2-Dehydro-3-deoxyglucarate aldolase (4.1.2.20) [N1204]
C12Y401/02021 . . 2-Dehydro-3-deoxy-6-phosphogalactonate aldolase (4.1.2.21) [N1204]
C12Y401/02022 . . Fructose-6-phosphate phosphoketolase (4.1.2.22) [N1202]
C12Y401/02023 . . 3-Deoxy-D-manno-octulosonate aldolase (4.1.2.23) [N1204]
C12Y401/02024 . . Dimethylaniline-N-oxide aldolase (4.1.2.24) [N1204]
C12Y401/02025 . . Dihydroneopterin aldolase (4.1.2.25) [N1204]
C12Y401/02026 . . Phenylserine aldolase (4.1.2.26) [N1204]
C12Y401/02027 . . Sphinganine-1-phosphate aldolase (4.1.2.27) [N1202]
C12Y401/02028 . . 2-Dehydro-3-deoxy-D-pentonate aldolase (4.1.2.28) [N1204]
C12Y401/02029 . . 5-Dehydro-2-deoxyphosphogluconate aldolase (4.1.2.29) [N1204]
C12Y401/02030 . . 17-Alpha-hydroxyprogesterone aldolase (4.1.2.30) [N1204]
C12Y401/02032 . . Trimethylamine-oxide aldolase (4.1.2.32) [N1204]
C12Y401/02033 . . Fucosterol-epoxide lyase (4.1.2.33) [N1204]
C12Y401/02034 . . 4-(2-carboxyphenyl)-2-oxobut-3-enoate aldolase (4.1.2.34) [N1204]
C12Y401/02035 . . Propioin synthase (4.1.2.35) [N1204]
C12Y401/02036 . . Lactate aldolase (4.1.2.36) [N1204]
C12Y401/02037 . . Hydroxynitrilase (4.1.2.37) (C12Y401/02046, C12Y401/02047 take precedence) [N1204]
C12Y401/02038 . . Benzoin aldolase (4.1.2.38) [N1204]
C12Y401/02040 . . Tagatose-bisphosphate aldolase (4.1.2.40) [N1204]
C12Y401/02041 . . Vanillin synthase (4.1.2.41) [N1204]
C12Y401/02042 . . D-Threonine aldolase (4.1.2.42) [N1204]
C12Y401/02043 . . 3-Hexulose-6-phosphate synthase (4.1.2.43) [N1204]
C12Y401/02044 . . Benzoyl-CoA-dihydrodiol lyase (4.1.2.44) [N1204]
C12Y401/02045 . . Trans-o-hydroxybenzylidenepyruvate hydratase-aldolase (4.1.2.45) [N1204]
C12Y401/02046 . . Aliphatic (R)-hydroxynitrile lyase (4.1.2.46) [N1204]
C12Y401/02047 . . (S)-Hydroxynitrile lyase (4.1.2.47) [N1204]
C12Y401/02048 . . Low-specificity L-threonine aldolase (4.1.2.48) [N1204]
C12Y401/02049 . . L-Allo-threonine aldolase (4.1.2.49) [N1204]

C12Y401/03 . Oxo-acid-lyases (4.1.3) [N1202]
C12Y401/03001 . . Isocitrate lyase (4.1.3.1) [N1202]
C12Y401/03003 . . N-Acetylneuraminate lyase (4.1.3.3) [N1204]
C12Y401/03004 . . Hydroxymethylglutaryl-CoA lyase (4.1.3.4) [N1202]

C12Y401/03006 . . Citrate (pro-3S)-lyase (4.1.3.6) [N1202]
C12Y401/03013 . . Oxalomalate lyase (4.1.3.13) [N1204]
C12Y401/03014 . . L-Erythro-3-hydroxyaspartate aldolase (4.1.3.14) [N1204]
C12Y401/03016 . . 4-Hydroxy-2-oxoglutarate aldolase (4.1.3.16) [N1204]
C12Y401/03017 . . 4-Hydroxy-4-methyl-2-oxoglutarate aldolase (4.1.3.17) [N1204]
C12Y401/03022 . . Citramalate lyase (4.1.3.22) [N1204]
C12Y401/03024 . . Malyl-CoA lyase (4.1.3.24) [N1204]
C12Y401/03025 . . Citramalyl-CoA lyase (4.1.3.25) [N1204]
C12Y401/03026 . . 3-Hydroxy-3-isohexenylglutaryl-CoA lyase (4.1.3.26) [N1204]
C12Y401/03027 . . Anthranilate synthase (4.1.3.27) [N1202]
C12Y401/03030 . . Methylisocitrate lyase (4.1.3.30) [N1204]
C12Y401/03032 . . 2,3-Dimethylmalate lyase (4.1.3.32) [N1204]
C12Y401/03034 . . Citryl-CoA lyase (4.1.3.34) [N1204]
C12Y401/03035 . . (1-hydroxycyclohexan-1-yl)acetyl-CoA lyase (4.1.3.35) [N1204]
C12Y401/03036 . . 1,4-Dihydroxy-2-naphthoyl-CoA synthase (4.1.3.36) [N1204]
C12Y401/03038 . . Aminodeoxychorismate lyase (4.1.3.38) [N1204]
C12Y401/03039 . . 4-Hydroxy-2-oxovalerate aldolase (4.1.3.39) [N1204]
C12Y401/03040 . . Chorismate lyase (4.1.3.40) [N1204]
C12Y401/03041 . . 3-Hydroxy-D-aspartate aldolase (4.1.3.41) [N1204]

C12Y401/99 . Other Carbon-Carbon Lyases (1.4.99) [N1202]
C12Y401/99001 . . Tryptophanase (4.1.99.1) [N1202]
C12Y401/99002 . . Tyrosine phenol-lyase (4.1.99.2) [N1204]
C12Y401/99003 . . Deoxyribodipyrimidine photo-lyase (4.1.99.3) [N1204]
C12Y401/99005 . . Octadecanal decarbonylase (4.1.99.5) [N1204]
C12Y401/99011 . . Benzylsuccinate synthase (4.1.99.11) [N1204]
C12Y401/99012 . . 3,4-Dihydroxy-2-butanone-4-phosphate synthase (4.1.99.12) [N1204]
C12Y401/99013 . . (6-4)DNA photolyase (4.1.99.13) [N1204]
C12Y401/99014 . . Spore photoproduct lyase (4.1.99.14) [N1204]
C12Y401/99016 . . Geosmin synthase (4.1.99.16) [N1204]
C12Y401/99017 . . Phosphomethylpyrimidine synthase (4.1.99.17) [N1204]
C12Y401/99018 . . Cyclic pyranopterin monophosphate synthase (4.1.99.18) [N1204]
C12Y401/99019 . . 2-Iminoacetate synthase (4.1.99.19) [N1204]

C12Y402/00 Carbon-oxygen lyases (4.2) [N1202]

C12Y402/01 . Hydro-lyases (4.2.1) [N1202]
C12Y402/01001 . . Carbonate dehydratase (4.2.1.1), i.e. carbonic anhydrase [N1202]
C12Y402/01002 . . Fumarate hydratase (4.2.1.2) [N1204]
C12Y402/01003 . . Aconitate hydratase (4.2.1.3) [N1202]
C12Y402/01004 . . Citrate dehydratase (4.2.1.4) [N1204]
C12Y402/01005 . . Arabinonate dehydratase (4.2.1.5) [N1204]
C12Y402/01006 . . Galactonate dehydratase (4.2.1.6) [N1204]

C12Y402/01007 . . Altronate dehydratase (4.2.1.7) [N1204]
C12Y402/01008 . . Mannonate dehydratase (4.2.1.8) [N1204]
C12Y402/01009 . . Dihydroxy-acid dehydratase (4.2.1.9), i.e. acetohydroxyacid dehydratase [N1202]
C12Y402/01010 . . 3-Dehydroquinate dehydratase (4.2.1.10) [N1204]
C12Y402/01011 . . Phosphopyruvate hydratase (4.2.1.11), i.e. enolase [N1202]
C12Y402/01012 . . Phosphogluconate dehydratase (4.2.1.12) [N1204]
C12Y402/01017 . . Enoyl-CoA hydratase (4.2.1.17), i.e. crotonase [N1202]
C12Y402/01018 . . Methylglutaconyl-CoA hydratase (4.2.1.18) [N1204]
C12Y402/01019 . . Imidazoleglycerol-phosphate dehydratase (4.2.1.19) [N1202]
C12Y402/01020 . . Tryptophan synthase (4.2.1.20) [N1202]
C12Y402/01022 . . Cystathionine beta-synthase (4.2.1.22) [N1204]
C12Y402/01024 . . Porphobilinogen synthase (4.2.1.24) [N1202]
C12Y402/01025 . . L-Arabinonate dehydratase (4.2.1.25) [N1204]
C12Y402/01027 . . Acetylenecarboxylate hydratase (4.2.1.27) [N1204]
C12Y402/01028 . . Propanediol dehydratase (4.2.1.28) [N1204]
C12Y402/01030 . . Glycerol dehydratase (4.2.1.30) [N1202]
C12Y402/01031 . . Maleate hydratase (4.2.1.31) [N1204]
C12Y402/01032 . . L(+)-Tartrate dehydratase (4.2.1.32) [N1204]
C12Y402/01033 . . 3-Isopropylmalate dehydratase (4.2.1.33) [N1204]
C12Y402/01034 . . (S)-2-Methylmalate dehydratase (4.2.1.34) [N1204]
C12Y402/01035 . . (R)-2-Methylmalate dehydratase (4.2.1.35) [N1204]
C12Y402/01036 . . Homoaconitate hydratase (4.2.1.36) [N1204]
C12Y402/01039 . . Gluconate dehydratase (4.2.1.39) [N1202]
C12Y402/01040 . . Glucarate dehydratase (4.2.1.40) [N1204]
C12Y402/01041 . . 5-Dehydro-4-deoxyglucarate dehydratase (4.2.1.41) [N1204]
C12Y402/01042 . . Galactarate dehydratase (4.2.1.42) [N1204]
C12Y402/01043 . . 2-Dehydro-3-deoxy-L-arabinonate dehydratase (4.2.1.43) [N1204]
C12Y402/01044 . . Myo-inosose-2 dehydratase (4.2.1.44) [N1204]
C12Y402/01045 . . CDP-glucose 4,6-dehydratase (4.2.1.45) [N1204]
C12Y402/01046 . . dTDP-glucose 4,6-dehydratase (4.2.1.46) [N1204]
C12Y402/01047 . . GDP-mannose 4,6-dehydratase (4.2.1.47), i.e. GMD [N1202]
C12Y402/01048 . . D-Glutamate cyclase (4.2.1.48) [N1204]
C12Y402/01049 . . Urocanate hydratase (4.2.1.49) [N1204]
C12Y402/01050 . . Pyrazolylalanine synthase (4.2.1.50) [N1204]
C12Y402/01051 . . Prephenate dehydratase (4.2.1.51) [N1204]
C12Y402/01052 . . Dihydrodipicolinate synthase (4.2.1.52) [N1202]
C12Y402/01053 . . Oleate hydratase (4.2.1.53) [N1204]
C12Y402/01054 . . Lactoyl-CoA dehydratase (4.2.1.54) [N1202]
C12Y402/01055 . . 3-Hydroxybutyryl-CoA dehydratase (4.2.1.55) [N1202]
C12Y402/01056 . . Itaconyl-CoA hydratase (4.2.1.56) [N1204]
C12Y402/01057 . . Isohexenylglutaconyl-CoA hydratase (4.2.1.57) [N1204]
C12Y402/01058 . . Crotonoyl-[acyl-carrier-protein hydratase (4.2.1.58) [N1204]

C12Y402/01059 . . 3-Hydroxyoctanoyl-[acyl-carrier-protein dehydratase (4.2.1.59) [N1204]
C12Y402/01060 . . 3-Hydroxydecanoyl-[acyl-carrier-protein dehydratase (4.2.1.60) [N1204]
C12Y402/01061 . . 3-Hydroxypalmitoyl-[acyl-carrier-protein dehydratase (4.2.1.61) [N1204]
C12Y402/01062 . . 5-Alpha-hydroxysteroid dehydratase (4.2.1.62) [N1204]
C12Y402/01065 . . 3-Cyanoalanine hydratase (4.2.1.65) [N1204]
C12Y402/01066 . . Cyanide hydratase (4.2.1.66) [N1202]
C12Y402/01067 . . D-Fuconate dehydratase (4.2.1.67) [N1204]
C12Y402/01068 . . L-Fuconate dehydratase (4.2.1.68) [N1204]
C12Y402/01069 . . Cyanamide hydratase (4.2.1.69) [N1204]
C12Y402/01070 . . Pseudouridylate synthase (4.2.1.70) [N1204]
C12Y402/01073 . . Protoaphin-aglucone dehydratase (cyclizing) (4.2.1.73) [N1204]
C12Y402/01074 . . Long-chain-enoyl-CoA hydratase (4.2.1.74) [N1204]
C12Y402/01075 . . Uroporphyrinogen-III synthase (4.2.1.75) [N1202]
C12Y402/01076 . . UDP-glucose 4,6-dehydratase (4.2.1.76) [N1204]
C12Y402/01077 . . Trans-L-3-hydroxyproline dehydratase (4.2.1.77) [N1204]
C12Y402/01078 . . (S)-norcoclaurine synthase (4.2.1.78) [N1204]
C12Y402/01079 . . 2-Methylcitrate dehydratase (4.2.1.79) [N1204]
C12Y402/01080 . . 2-Oxopent-4-enoate hydratase (4.2.1.80) [N1204]
C12Y402/01081 . . D(-)-tartrate dehydratase (4.2.1.81) [N1204]
C12Y402/01082 . . Xylonate dehydratase (4.2.1.82) [N1204]
C12Y402/01083 . . 4-Oxalmesaconate hydratase (4.2.1.83) [N1204]
C12Y402/01084 . . Nitrile hydratase (4.2.1.84) [N1202]
C12Y402/01085 . . Dimethylmaleate hydratase (4.2.1.85) [N1204]
C12Y402/01087 . . Octopamine dehydratase (4.2.1.87) [N1204]
C12Y402/01088 . . Synephrine dehydratase (4.2.1.88) [N1204]
C12Y402/01089 . . Carnitine dehydratase (4.2.1.89) [N1204]
C12Y402/01090 . . L-Rhamnonate dehydratase (4.2.1.90) [N1204]
C12Y402/01091 . . Arogenate dehydratase (4.2.1.91) [N1204]
C12Y402/01092 . . Hydroperoxide dehydratase (4.2.1.92) [N1204]
C12Y402/01093 . . ATP-dependent NAD(P)H-hydrate dehydratase (4.2.1.93) [N1204]
C12Y402/01094 . . Scytalone dehydratase (4.2.1.94) [N1204]
C12Y402/01095 . . Kievitone hydratase (4.2.1.95) [N1204]
C12Y402/01096 . . 4a-Hydroxytetrahydrobiopterin dehydratase (4.2.1.96) [N1204]
C12Y402/01097 . . Phaseollidin hydratase (4.2.1.97) [N1204]
C12Y402/01098 . . 16-Alpha-hydroxyprogesterone dehydratase (4.2.1.98) [N1204]
C12Y402/01099 . . 2-Methylisocitrate dehydratase (4.2.1.99) [N1204]
C12Y402/01100 . . Cyclohexa-1,5-dienecarbonyl-CoA hydratase (4.2.1.100) [N1204]
C12Y402/01101 . . Trans-feruloyl-CoA hydratase (4.2.1.101) [N1204]
C12Y402/01103 . . Cyclohexyl-isocyanide hydratase (4.2.1.103) [N1204]
C12Y402/01104 . . Cyanase (4.2.1.104) [N1204]
C12Y402/01105 . . 2-Hydroxyisoflavanone dehydratase (4.2.1.105) [N1204]
C12Y402/01106 . . Bile-acid 7-alpha-dehydratase (4.2.1.106) [N1204]

C12Y402/01107 . . 3-Alpha,7-alpha,12-alpha-trihydroxy-5-beta-cholest-24-enoyl-CoA hydratase (4.2.1.107) [N1204]
C12Y402/01108 . . Ectoine synthase (4.2.1.108) [N1204]
C12Y402/01109 . . Methylthioribulose 1-phosphate dehydratase (4.2.1.109) [N1204]
C12Y402/01110 . . Aldos-2-ulose dehydratase (4.2.1.110) [N1204]
C12Y402/01111 . . 1,5-Anhydro-D-fructose dehydratase (4.2.1.111) [N1204]
C12Y402/01112 . . Acetylene hydratase (4.2.1.112) [N1204]
C12Y402/01113 . . o-Succinylbenzoate synthase (4.2.1.113) [N1204]
C12Y402/01114 . . Methanogen homoaconitase (4.2.1.114) [N1204]
C12Y402/01115 . . UDP-N-acetylglucosamine 4,6-dehydratase (inverting) (4.2.1.115) [N1204]
C12Y402/01116 . . 3-Hydroxypropionyl-CoA dehydratase (4.2.1.116) [N1204]
C12Y402/01117 . . 2-Methylcitrate dehydratase (2-methyl-trans-aconitate forming) (4.2.1.117) [N1204]
C12Y402/01118 . . 3-Dehydroshikimate dehydratase (4.2.1.118) [N1204]
C12Y402/01119 . . Enoyl-CoA hydratase 2 (4.2.1.119) [N1204]
C12Y402/01120 . . 4-Hydroxybutanoyl-CoA dehydratase (4.2.1.120) [N1204]
C12Y402/01121 . . Colneleate synthase (4.2.1.121) [N1204]
C12Y402/01122 . . Tryptophan synthase (indole-salvaging) (4.2.1.122) [N1204]
C12Y402/01123 . . Tetrahymanol synthase (4.2.1.123) [N1204]
C12Y402/01124 . . Arabidiol synthase (4.2.1.124) [N1204]
C12Y402/01125 . . Dammarenediol II synthase (4.2.1.125) [N1204]
C12Y402/01126 . . N-Acetylmuramic acid 6-phosphate etherase (4.2.1.126) [N1204]
C12Y402/01127 . . Linalool dehydratase (4.2.1.127) [N1204]
C12Y402/01128 . . Lupan-3-beta,20-diol synthase (4.2.1.128) [N1204]
C12Y402/01129 . . Squalene--hopanol cyclase (4.2.1.129) [N1204]
C12Y402/01130 . . D-Lactate dehydratase (4.2.1.130) [N1204]
C12Y402/01131 . . Carotenoid 1,2-hydratase (4.2.1.131) [N1204]

C12Y402/02 . acting on polysaccharides (4.2.2) [N1202]
C12Y402/02001 . . Hyaluronate lyase (4.2.2.1) [N1202]
C12Y402/02002 . . Pectate lyase (4.2.2.2) [N1202]
C12Y402/02003 . . Poly(beta-D-mannuronate) lyase (4.2.2.3) [N1204]
C12Y402/02004 . . Chondroitin ABC lyase (4.2.2.4), i.e. chondroitinase (C12Y402/02020 or C12Y402/02021 takes precedence) [N1202]
C12Y402/02005 . . Chondroitin AC lyase (4.2.2.5) [N1202]
C12Y402/02006 . . Oligogalacturonide lyase (4.2.2.6) [N1204]
C12Y402/02007 . . Heparin lyase (4.2.2.7), i.e. heparinase I [N1202]
C12Y402/02008 . . Heparin-sulfate lyase (4.2.2.8) [N1204]
C12Y402/02009 . . Pectate disaccharide-lyase (4.2.2.9) [N1202]
C12Y402/02010 . . Pectin lyase (4.2.2.10) [N1202]
C12Y402/02011 . . Poly(alpha-L-guluronate) lyase (4.2.2.11), i.e. alginase II [N1202]
C12Y402/02012 . . Xanthan lyase (4.2.2.12) [N1202]
C12Y402/02013 . . Exo-(1->4)-alpha-D-glucan lyase (4.2.2.13) [N1204]
C12Y402/02014 . . Glucuronan lyase (4.2.2.14) [N1204]

C12Y402/02015 . . Anhydrosialidase (4.2.2.15) [N1202]
C12Y402/02016 . . Levan fructotransferase (DFA-IV-forming) (4.2.2.16) [N1204]
C12Y402/02017 . . Inulin fructotransferase (DFA-I-forming) (4.2.2.17) [N1204]
C12Y402/02018 . . Inulin fructotransferase (DFA-III-forming) (4.2.2.18) [N1204]
C12Y402/02019 . . Chondroitin B lyase (4.2.2.19) [N1204]
C12Y402/02020 . . Chondroitin-sulfate-ABC endolyase (4.2.2.20) [N1202]
C12Y402/02021 . . Chondroitin-sulfate-ABC exolyase (4.2.2.21) [N1202]
C12Y402/02022 . . Pectate trisaccharide-lyase (4.2.2.22) [N1204]
C12Y402/02023 . . Rhamnogalacturonan endolyase (4.2.2.23) [N1204]
C12Y402/02024 . . Rhamnogalacturonan exolyase (4.2.2.24) [N1204]
C12Y402/02025 . . Gellan lyase (4.2.2.25) [N1204]

C12Y402/03 . acting on phosphates (4.2.3) [N1202]
C12Y402/03001 . . Threonine synthase (4.2.3.1) [N1202]
C12Y402/03002 . . Ethanolamine-phosphate phospho-lyase (4.2.3.2) [N1204]
C12Y402/03003 . . Methylglyoxal synthase (4.2.3.3) [N1204]
C12Y402/03004 . . 3-Dehydroquinate synthase (4.2.3.4) [N1202]
C12Y402/03005 . . Chorismate synthase (4.2.3.5) [N1204]
C12Y402/03006 . . Trichodiene synthase (4.2.3.6) [N1204]
C12Y402/03007 . . Pentalenene synthase (4.2.3.7) [N1204]
C12Y402/03008 . . Casbene synthase (4.2.3.8) [N1204]
C12Y402/03009 . . Aristolochene synthase (4.2.3.9) [N1202]
C12Y402/03010 . . (-)-Endo-fenchol synthase (4.2.3.10) [N1204]
C12Y402/03011 . . Sabinene-hydrate synthase (4.2.3.11) [N1204]
C12Y402/03012 . . 6-Pyruvoyltetrahydropterin synthase (4.2.3.12) [N1204]
C12Y402/03013 . . (+)-Delta-cadinene synthase (4.2.3.13) [N1204]
C12Y402/03014 . . Pinene synthase (4.2.3.14) [N1204]
C12Y402/03015 . . Myrcene synthase (4.2.3.15) [N1204]
C12Y402/03016 . . (4S)-Limonene synthase (4.2.3.16) [N1204]
C12Y402/03017 . . Taxadiene synthase (4.2.3.17) [N1204]
C12Y402/03018 . . Abietadiene synthase (4.2.3.18) [N1204]
C12Y402/03019 . . Ent-kaurene synthase (4.2.3.19) [N1204]
C12Y402/03020 . . (R)-Limonene synthase (4.2.3.20) [N1204]
C12Y402/03021 . . Vetispiradiene synthase (4.2.3.21) [N1204]
C12Y402/03022 . . Germacradienol synthase (4.2.3.22) [N1204]
C12Y402/03023 . . Germacrene-A synthase (4.2.3.23) [N1204]
C12Y402/03024 . . Amorpha-4,11-diene synthase (4.2.3.24) [N1204]
C12Y402/03025 . . S-Linalool synthase (4.2.3.25) [N1204]
C12Y402/03026 . . R-Linalool synthase (4.2.3.26) [N1204]
C12Y402/03027 . . Isoprene synthase (4.2.3.27) [N1202]
C12Y402/03028 . . Ent-cassa-12,15-diene synthase (4.2.3.28) [N1204]
C12Y402/03029 . . Ent-sandaracopimaradiene synthase (4.2.3.29) [N1204]

C12Y402/03030 . . Ent-pimara-8(14),15-diene synthase (4.2.3.30) [N1204]
C12Y402/03031 . . Ent-pimara-9(11),15-diene synthase (4.2.3.31) [N1204]
C12Y402/03032 . . Levopimaradiene synthase (4.2.3.32) [N1204]
C12Y402/03033 . . Stemar-13-ene synthase (4.2.3.33) [N1204]
C12Y402/03034 . . Stemod-13(17)-ene synthase (4.2.3.34) [N1204]
C12Y402/03035 . . Syn-pimara-7,15-diene synthase (4.2.3.35) [N1204]
C12Y402/03036 . . Terpentetriene synthase (4.2.3.36) [N1204]
C12Y402/03037 . . Epi-isozizaene synthase (4.2.3.37) [N1204]
C12Y402/03038 . . Alpha-bisabolene synthase (4.2.3.38) [N1204]
C12Y402/03039 . . Epi-cedrol synthase (4.2.3.39) [N1204]
C12Y402/03040 . . (Z)-Gamma-bisabolene synthase (4.2.3.40) [N1204]
C12Y402/03041 . . Elisabethatriene synthase (4.2.3.41) [N1204]
C12Y402/03042 . . Aphidicolan-16-beta-ol synthase (4.2.3.42) [N1204]
C12Y402/03043 . . Fusicocca-2,10(14)-diene synthase (4.2.3.43) [N1204]
C12Y402/03044 . . Isopimara-7,15-diene synthase (4.2.3.44) [N1204]
C12Y402/03045 . . Phyllocladan-16-alpha-ol synthase (4.2.3.45) [N1204]
C12Y402/03046 . . Alpha-farnesene synthase (4.2.3.46) [N1204]
C12Y402/03047 . . Beta-farnesene synthase (4.2.3.47) [N1204]
C12Y402/03048 . . (3S,6E)-Nerolidol synthase (4.2.3.48) [N1204]
C12Y402/03049 . . (3R,6E)-Nerolidol synthase (4.2.3.49) [N1204]
C12Y402/03050 . . (+)-Alpha-santalene synthase ((2Z,6Z)-farnesyl diphosphate cyclizing) (4.2.3.50) [N1204]
C12Y402/03051 . . Beta-phellandrene synthase (neryl-diphosphate-cyclizing) (4.2.3.51) [N1204]
C12Y402/03052 . . (4S)-Beta-phellandrene synthase (geranyl-diphosphate-cyclizing) (4.2.3.52) [N1204]
C12Y402/03053 . . (+)-Endo-beta-bergamotene synthase ((2Z,6Z)-farnesyl diphosphate cyclizing) (4.2.3.53) [N1204]
C12Y402/03054 . . (-)-Endo-alpha-bergamotene synthase ((2Z,6Z)-farnesyl diphosphate cyclizing) (4.2.3.54) [N1204]
C12Y402/03055 . . (S)-Beta-bisabolene synthase (4.2.3.55) [N1204]
C12Y402/03056 . . Gamma-humulene synthase (4.2.3.56) [N1204]
C12Y402/03057 . . Beta-caryophyllene synthase (4.2.3.57) [N1204]
C12Y402/03058 . . Longifolene synthase (4.2.3.58) [N1204]
C12Y402/03059 . . (E)-Gamma-bisabolene synthase (4.2.3.59) [N1204]
C12Y402/03060 . . Germacrene C synthase (4.2.3.60) [N1204]
C12Y402/03061 . . 5-Epiaristolochene synthase (4.2.3.61) [N1204]
C12Y402/03062 . . (-)-Gamma-cadinene synthase ((2Z,6E)-farnesyl diphosphate cyclizing) (4.2.3.62) [N1204]
C12Y402/03063 . . (+)-Cubenene synthase (4.2.3.63) [N1204]
C12Y402/03064 . . (+)-Epicubenol synthase (4.2.3.64) [N1204]
C12Y402/03065 . . Zingiberene synthase (4.2.3.65) [N1204]
C12Y402/03066 . . Beta-selinene cyclase (4.2.3.66) [N1204]
C12Y402/03067 . . Cis-muuroladiene synthase (4.2.3.67) [N1204]
C12Y402/03068 . . Beta-eudesmol synthase (4.2.3.68) [N1204]

C12Y402/03069 . . (+)-Alpha-barbatene synthase (4.2.3.69) [N1204]
C12Y402/03070 . . Patchoulol synthase (4.2.3.70) [N1204]
C12Y402/03071 . . (E,E)-Germacrene B synthase (4.2.3.71) [N1204]
C12Y402/03072 . . Alpha-gurjunene synthase (4.2.3.72) [N1204]
C12Y402/03073 . . Valencene synthase (4.2.3.73) [N1204]
C12Y402/03074 . . Presilphiperfolanol synthase (4.2.3.74) [N1204]
C12Y402/03075 . . (-)-Germacrene D synthase (4.2.3.75) [N1204]
C12Y402/03076 . . (+)-Delta-selinene synthase (4.2.3.76) [N1204]
C12Y402/03077 . . (+)-Germacrene D synthase (4.2.3.77) [N1204]
C12Y402/03078 . . Beta-chamigrene synthase (4.2.3.78) [N1204]
C12Y402/03079 . . Thujopsene synthase (4.2.3.79) [N1204]
C12Y402/03080 . . Alpha-longipinene synthase (4.2.3.80) [N1204]
C12Y402/03081 . . Exo-alpha-bergamotene synthase (4.2.3.81) [N1204]
C12Y402/03082 . . Alpha-santalene synthase (4.2.3.82) [N1204]
C12Y402/03083 . . Beta-santalene synthase (4.2.3.83) [N1204]
C12Y402/03084 . . 10-Epi-gamma-eudesmol synthase (4.2.3.84) [N1204]
C12Y402/03085 . . Alpha-eudesmol synthase (4.2.3.85) [N1204]
C12Y402/03086 . . 7-Epi-alpha-selinene synthase (4.2.3.86) [N1204]
C12Y402/03087 . . Alpha-guaiene synthase (4.2.3.87) [N1204]
C12Y402/03088 . . Viridiflorene synthase (4.2.3.88) [N1204]
C12Y402/03089 . . (+)-Beta-caryophyllene synthase (4.2.3.89) [N1204]
C12Y402/03090 . . 5-Epi-alpha-selinene synthase (4.2.3.90) [N1204]
C12Y402/03091 . . Cubebol synthase (4.2.3.91) [N1204]
C12Y402/03092 . . (+)-Gamma-cadinene synthase (4.2.3.92) [N1204]
C12Y402/03093 . . Delta-guaiene synthase (4.2.3.93) [N1204]

C12Y402/99 . Other carbon-oxygen lyases (4.2.99) [N1202]
C12Y402/99006 . . Chondroitin sulfate lyase (4.2.99.6) (C12Y402/02005, C12Y402/02020, C12Y402/02021 take precedence) [N1204]
C12Y402/99012 . . Carboxymethyloxysuccinate lyase (4.2.99.12) [N1204]
C12Y402/99018 . . DNA-(apurinic or apyrimidinic site) lyase (4.2.99.18) [N1202]
C12Y402/99020 . . 2-Succinyl-6-hydroxy-2,4-cyclohexadiene-1-carboxylate synthase (4.2.99.20) [N1204]
C12Y402/99021 . . Isochorismate lyase (4.2.99.21) [N1204]

C12Y403/00 Carbon-nitrogen lyases (4.3) [N1202]

C12Y403/01 . Ammonia-lyases (4.3.1) [N1202]
C12Y403/01001 . . Aspartate ammonia-lyase (4.3.1.1), i.e. aspartase [N1202]
C12Y403/01002 . . Methylaspartate ammonia-lyase (4.3.1.2) [N1204]
C12Y403/01003 . . Histidine ammonia-lyase (4.3.1.3) [N1202]
C12Y403/01004 . . Formimidoyltetrahydrofolate cyclodeaminase (4.3.1.4) [N1204]
C12Y403/01005 . . Phenylalanine ammonia-lyase (4.3.1.5) (C12Y403/01023-C12Y403/01025 takes

precedence) [N1202]

C12Y403/01006 . . Beta-alanyl-CoA ammonia-lyase (4.3.1.6) [N1204]
C12Y403/01007 . . Ethanolamine ammonia-lyase (4.3.1.7) [N1204]
C12Y403/01009 . . Glucosaminate ammonia-lyase (4.3.1.9) [N1204]
C12Y403/01010 . . Serine-sulfate ammonia-lyase (4.3.1.10) [N1204]
C12Y403/01012 . . Ornithine cyclodeaminase (4.3.1.12) [N1204]
C12Y403/01013 . . Carbamoyl-serine ammonia-lyase (4.3.1.13) [N1204]
C12Y403/01014 . . 3-Aminobutyryl-CoA ammonia-lyase (4.3.1.14) [N1204]
C12Y403/01015 . . Diaminopropionate ammonia-lyase (4.3.1.15) [N1204]
C12Y403/01016 . . Threo-3-hydroxy-L-aspartate ammonia-lyase (4.3.1.16) [N1204]
C12Y403/01017 . . L-Serine ammonia-lyase (4.3.1.17) [N1204]
C12Y403/01018 . . D-Serine ammonia-lyase (4.3.1.18) [N1204]
C12Y403/01019 . . Threonine ammonia-lyase (4.3.1.19) [N1202]
C12Y403/01020 . . Erythro-3-hydroxy-L-aspartate ammonia-lyase (4.3.1.20) [N1204]
C12Y403/01022 . . 3,4-Dihydroxyphenylalanine reductive deaminase (4.3.1.22) [N1204]
C12Y403/01023 . . Tyrosine ammonia-lyase (4.3.1.23) [N1202]
C12Y403/01024 . . Phenylalanine ammonia-lyase (4.3.1.24) [N1202]
C12Y403/01025 . . Phenylalanine-tyrosine ammonia-lyase (4.3.1.25) [N1202]
C12Y403/01026 . . Chromopyrrolate synthase (4.3.1.26) [N1204]
C12Y403/01027 . . Threo-3-hydroxy-D-aspartate ammonia-lyase (4.3.1.27) [N1204]

C12Y403/02 . Amidine-lyases (4.3.2) [N1204]
C12Y403/02001 . . Argininosuccinate lyase (4.3.2.1) [N1204]
C12Y403/02002 . . Adenylosuccinate lyase (4.3.2.2) [N1204]
C12Y403/02003 . . Ureidoglycolate lyase (4.3.2.3) [N1204]
C12Y403/02004 . . Purine imidazole-ring cyclase (4.3.2.4) [N1204]
C12Y403/02005 . . Peptidylamidoglycolate lyase (4.3.2.5) [N1204]

C12Y403/03 . Amine-lyases (4.3.3) [N1204]
C12Y403/03001 . . 3-Ketovalidoxylamine C-N-lyase (4.3.3.1) [N1204]
C12Y403/03002 . . Strictosidine synthase (4.3.3.2) [N1204]
C12Y403/03003 . . Deacetylisoipecoside synthase (4.3.3.3) [N1204]
C12Y403/03004 . . Deacetylipecoside synthase (4.3.3.4) [N1204]
C12Y403/03005 . . 4'-Demethylrebeccamycin synthase (4.3.3.5) [N1204]
C12Y403/03006 . . Pyridoxal 5'-phosphate synthase (glutamine hydrolyzing) (4.3.3.6) [N1204]

C12Y403/99 . Other carbon-nitrogen lyases (4.3.99) [N1204]
C12Y403/99002 . . Carboxybiotin decarboxylase (4.3.99.2) [N1204]

C12Y404/00 Carbon-sulfur lyases (4.4) [N1202]

C12Y404/01 . Carbon-sulfur lyases (4.4.1) [N1202]
C12Y404/01001 . . Cystathionine gamma-lyase (4.4.1.1) [N1204]

C12Y404/01002 . . Homocysteine desulfhydrase (4.4.1.2) [N1204]
C12Y404/01003 . . Dimethylpropiothetin dethiomethylase (4.4.1.3) [N1204]
C12Y404/01004 . . Alliin lyase (4.4.1.4) [N1202]
C12Y404/01005 . . Lactoylglutathione lyase (4.4.1.5) [N1204]
C12Y404/01006 . . S-Alkylcysteine lyase (4.4.1.6) [N1204]
C12Y404/01008 . . Cystathionine beta-lyase (4.4.1.8) [N1204]
C12Y404/01009 . . L-3-Cyanoalanine synthase (4.4.1.9) [N1204]
C12Y404/01010 . . Cysteine lyase (4.4.1.10) [N1204]
C12Y404/01011 . . Methionine gamma-lyase (4.4.1.11) [N1204]
C12Y404/01013 . . Cysteine-S-conjugate beta-lyase (4.4.1.13) [N1204]
C12Y404/01014 . . 1-Aminocyclopropane-1-carboxylate synthase (4.4.1.14) [N1204]
C12Y404/01015 . . D-Cysteine desulfhydrase (4.4.1.15) [N1204]
C12Y404/01016 . . Selenocysteine lyase (4.4.1.16) [N1204]
C12Y404/01017 . . Holocytochrome-c synthase (4.4.1.17) [N1204]
C12Y404/01019 . . Phosphosulfolactate synthase (4.4.1.19) [N1204]
C12Y404/01020 . . Leukotriene-C4 synthase (4.4.1.20) [N1202]
C12Y404/01021 . . S-Ribosylhomocysteine lyase (4.4.1.21) [N1204]
C12Y404/01022 . . S-(Hydroxymethyl)glutathione synthase (4.4.1.22) [N1204]
C12Y404/01023 . . 2-Hydroxypropyl-CoM lyase (4.4.1.23) [N1204]
C12Y404/01024 . . (2R)-Sulfolactate sulfo-lyase (4.4.1.24) [N1204]
C12Y404/01025 . . L-Cysteate sulfo-lyase (4.4.1.25) [N1204]

C12Y405/00 Carbon-halide lyases (4.5) [N1202]

C12Y405/01 . Carbon-halide lyases (4.5.1) [N1204]
C12Y405/01001 . . DDT-dehydrochlorinase (4.5.1.1) [N1204]
C12Y405/01002 . . 3-Chloro-D-alanine dehydrochlorinase (4.5.1.2) [N1204]
C12Y405/01003 . . Dichloromethane dehalogenase (4.5.1.3) [N1204]
C12Y405/01004 . . L-2-Amino-4-chloropent-4-enoate dehydrochlorinase (4.5.1.4) [N1204]
C12Y405/01005 . . S-Carboxymethylcysteine synthase (4.5.1.5) [N1204]

C12Y406/00 Phosphorus-oxygen lyases (4.6) [N1202]

C12Y406/01 . Phosphorus-oxygen lyases (4.6.1) [N1202]
C12Y406/01001 . . Aodenylate cyclase (4.6.1.1) [N1202]
C12Y406/01002 . . Guanylate cyclase (4.6.1.2) [N1202]
C12Y406/01006 . . Cytidylate cyclase (4.6.1.6) [N1204]
C12Y406/01012 . . 2-C-Methyl-D-erythritol 2,4-cyclodiphosphate synthase (4.6.1.12) [N1202]
C12Y406/01013 . . Phosphatidylinositol diacylglycerol-lyase (4.6.1.13) [N1202]
C12Y406/01014 . . Glycosylphosphatidylinositol diacylglycerol-lyase (4.6.1.14) [N1204]
C12Y406/01015 . . FAD-AMP lyase (cyclizing) (4.6.1.15) [N1204]

C12Y499/00 Other lyases (4.99) [N1202]

C12Y499/01 . Other lyases (4.99.1) [N1202]
C12Y499/01001 . . Ferrochelatase (4.99.1.1) [N1202]
C12Y499/01002 . . Alkylmercury lyase (4.99.1.2) [N1204]
C12Y499/01003 . . Sirohydrochlorin cobaltochelatase (4.99.1.3) [N1204]
C12Y499/01004 . . Sirohydrochlorin ferrochelatase (4.99.1.4) [N1204]
C12Y499/01005 . . Aliphatic aldoxime dehydratase (4.99.1.5) [N1204]
C12Y499/01006 . . Indoleacetaldoxime dehydratase (4.99.1.6) [N1204]
C12Y499/01007 . . Phenylacetaldoxime dehydratase (4.99.1.7) [N1204]
C12Y499/01008 . . Heme ligase (4.99.1.8) [N1204]

C12Y501/00 Racemaces and epimerases (5.1) [N1202]

C12Y501/01 . acting on amino acids and derivatives (5.1.1) [N1202]
C12Y501/01001 . . Alanine racemase (5.1.1.1) [N1202]
C12Y501/01002 . . Methionine racemase (5.1.1.2) [N1204]
C12Y501/01003 . . Glutamate racemase (5.1.1.3) [N1204]
C12Y501/01004 . . Proline racemase (5.1.1.4) [N1204]
C12Y501/01005 . . Lysine racemase (5.1.1.5) [N1204]
C12Y501/01006 . . Threonine racemase (5.1.1.6) [N1204]
C12Y501/01007 . . Diaminopimelate epimerase (5.1.1.7) [N1204]
C12Y501/01008 . . 4-Hydroxyproline epimerase (5.1.1.8) [N1204]
C12Y501/01009 . . Arginine racemase (5.1.1.9) [N1204]
C12Y501/01010 . . Amino-acid racemase (5.1.1.10) [N1204]
C12Y501/01011 . . Phenylalanine racemase (ATP-hydrolyzing) (5.1.1.11) [N1204]
C12Y501/01012 . . Ornithine racemase (5.1.1.12) [N1204]
C12Y501/01013 . . Aspartate racemase (5.1.1.13) [N1204]
C12Y501/01014 . . Nocardicin-A epimerase (5.1.1.14) [N1204]
C12Y501/01015 . . 2-Aminohexano-6-lactam racemase (5.1.1.15) [N1204]
C12Y501/01016 . . Protein-serine epimerase (5.1.1.16) [N1204]
C12Y501/01017 . . Isopenicillin-N epimerase (5.1.1.17) [N1204]
C12Y501/01018 . . Serine racemase (5.1.1.18) [N1202]

C12Y501/02 . acting on hydroxy acids and derivatives (5.1.2) [N1204]
C12Y501/02001 . . Lactate racemase (5.1.2.1) [N1204]
C12Y501/02002 . . Mandelate racemase (5.1.2.2) [N1204]
C12Y501/02003 . . 3-Hydroxybutyryl-CoA epimerase (5.1.2.3) [N1204]
C12Y501/02004 . . Acetoin racemase (5.1.2.4) [N1204]
C12Y501/02005 . . Tartrate epimerase (5.1.2.5) [N1204]
C12Y501/02006 . . Isocitrate epimerase (5.1.2.6) [N1204]

C12Y501/03 . acting on carbohydrates and derivatives (5.1.3) [N1202]
C12Y501/03001 . . Ribulose-phosphate 3-epimerase (5.1.3.1) [N1202]

C12Y501/03002 . . UDP-glucose 4-epimerase (5.1.3.2), i.e. UDP-galactose 4-epimerase [N1202]
C12Y501/03003 . . Aldose 1-epimerase (5.1.3.3) [N1202]
C12Y501/03004 . . L-Ribulose-5-phosphate 4-epimerase (5.1.3.4) [N1202]
C12Y501/03005 . . UDP-arabinose 4-epimerase (5.1.3.5) [N1204]
C12Y501/03006 . . UDP-glucuronate 4-epimerase (5.1.3.6) [N1204]
C12Y501/03007 . . UDP-N-acetylglucosamine 4-epimerase (5.1.3.7) [N1202]
C12Y501/03008 . . N-Acylglucosamine 2-epimerase (5.1.3.8) [N1204]
C12Y501/03009 . . N-Acylglucosamine-6-phosphate 2-epimerase (5.1.3.9) [N1202]
C12Y501/03010 . . CDP-paratose 2-epimerase (5.1.3.10) [N1204]
C12Y501/03011 . . Cellobiose epimerase (5.1.3.11) [N1204]
C12Y501/03012 . . UDP-glucuronate 5'-epimerase (5.1.3.12) [N1202]
C12Y501/03013 . . dTDP-4-dehydrorhamnose 3,5-epimerase (5.1.3.13) [N1202]
C12Y501/03014 . . UDP-N-acetylglucosamine 2-epimerase (5.1.3.14) [N1202]
C12Y501/03015 . . Glucose-6-phosphate 1-epimerase (5.1.3.15) [N1204]
C12Y501/03016 . . UDP-glucosamine 4-epimerase (5.1.3.16) [N1204]
C12Y501/03017 . . Heparosan-N-sulfate-glucuronate 5-epimerase (5.1.3.17) [N1204]
C12Y501/03018 . . GDP-mannose 3,5-epimerase (5.1.3.18) [N1202]
C12Y501/03019 . . Chondroitin-glucuronate 5-epimerase (5.1.3.19) [N1204]
C12Y501/03020 . . ADP-glyceromanno-heptose 6-epimerase (5.1.3.20) [N1204]
C12Y501/03021 . . Maltose epimerase (5.1.3.21) [N1204]
C12Y501/03022 . . L-Ribulose-5-phosphate 3-epimerase (5.1.3.22) [N1204]
C12Y501/03023 . . UDP-2,3-diacetamido-2,3-dideoxyglucuronic acid 2-epimerase (5.1.3.23) [N1204]
C12Y501/03024 . . N-Acetylneuraminate epimerase (5.1.3.24) [N1204]

C12Y501/99 . acting on other compounds (5.1.99) [N1202]
C12Y501/99001 . . Methylmalonyl-CoA epimerase (5.1.99.1) [N1204]
C12Y501/99002 . . 16-Hydroxysteroid epimerase (5.1.99.2) [N1204]
C12Y501/99003 . . Allantoin racemase (5.1.99.3) [N1204]
C12Y501/99004 . . Alpha-methylacyl-CoA racemase (5.1.99.4) [N1202]
C12Y501/99005 . . Hydantoin racemase (5.1.99.5) [N1204]

C12Y502/00 Cis-trans-isomerases (5.2) [N1202]

C12Y502/01 . Cis-trans-Isomerases (5.2.1) [N1202]
C12Y502/01001 . . Maleate isomerase (5.2.1.1) [N1204]
C12Y502/01002 . . Maleylacetoacetate isomerase (5.2.1.2) [N1204]
C12Y502/01003 . . Retinal isomerase (5.2.1.3) (C12Y101/01300, C12Y101/01315, C12Y203/01135, C12Y301/01064 take precedence) [N1204]
C12Y502/01004 . . Maleylpyruvate isomerase (5.2.1.4) [N1204]
C12Y502/01005 . . Linoleate isomerase (5.2.1.5) [N1202]
C12Y502/01006 . . Furylfuramide isomerase (5.2.1.6) [N1204]
C12Y502/01008 . . Peptidylprolyl isomerase (5.2.1.8), i.e. cyclophilin [N1202]
C12Y502/01009 . . Farnesol 2-isomerase (5.2.1.9) [N1204]

C12Y502/01010 . . 2-Chloro-4-carboxymethylenebut-2-en-1,4-olide isomerase (5.2.1.10) [N1204]
C12Y502/01012 . . Zeta-carotene isomerase (5.2.1.12) [N1204]
C12Y502/01013 . . Prolycopene isomerase (5.2.1.13) [N1204]

C12Y503/00 Intramolecular oxidoreductases (5.3) [N1202]

C12Y503/01 . interconverting aldoses and ketoses (5.3.1) [N1202]
C12Y503/01001 . . Triose-phosphate isomerase (5.3.1.1) [N1202]
C12Y503/01003 . . Arabinose isomerase (5.3.1.3) [N1204]
C12Y503/01004 . . L-Arabinose isomerase (5.3.1.4) [N1202]
C12Y503/01005 . . Xylose isomerase (5.3.1.5) [N1202]
C12Y503/01006 . . Ribose-5-phosphate isomerase (5.3.1.6) [N1204]
C12Y503/01007 . . Mannose isomerase (5.3.1.7) [N1202]
C12Y503/01008 . . Mannose-6-phosphate isomerase (5.3.1.8) [N1204]
C12Y503/01009 . . Glucose-6-phosphate isomerase (5.3.1.9) [N1202]
C12Y503/01012 . . Glucuronate isomerase (5.3.1.12) [N1204]
C12Y503/01013 . . Arabinose-5-phosphate isomerase (5.3.1.13) [N1204]
C12Y503/01014 . . L-Rhamnose isomerase (5.3.1.14) [N1202]
C12Y503/01015 . . D-Lyxose ketol-isomerase (5.3.1.15) [N1204]
C12Y503/01016 . . 1-(5-Phosphoribosyl)-5-((5-phosphoribosylamino)methylideneamino)imidazole-4-carboxan (5.3.1.16) [N1204]
C12Y503/01017 . . 4-Deoxy-L-threo-5-hexosulose-uronate ketol-isomerase (5.3.1.17) [N1204]
C12Y503/01018 . . Glucose isomerase (5.3.1.18) [N1202]
C12Y503/01020 . . Ribose isomerase (5.3.1.20) [N1202]
C12Y503/01021 . . Corticosteroid side-chain-isomerase (5.3.1.21) [N1204]
C12Y503/01022 . . Hydroxypyruvate isomerase (5.3.1.22) [N1204]
C12Y503/01023 . . S-methyl-5-thioribose-1-phosphate isomerase (5.3.1.23), i.e. 5-methylthioribose-1-phosphate isomerase [N1204]
C12Y503/01024 . . Phosphoribosylanthranilate isomerase (5.3.1.24) [N1202]
C12Y503/01025 . . L-Fucose isomerase (5.3.1.25) [N1204]
C12Y503/01026 . . Galactose-6-phosphate isomerase (5.3.1.26) [N1202]
C12Y503/01027 . . 6-Phospho-3-hexuloisomerase (5.3.1.27) [N1204]
C12Y503/01028 . . D-Sedoheptulose 7-phosphate isomerase (5.3.1.28) [N1204]

C12Y503/02 . interconverting keto- and enol-groups (5.3.2) [N1204]
C12Y503/02001 . . Phenylpyruvate tautomerase (5.3.2.1) [N1204]
C12Y503/02002 . . Oxaloacetate tautomerase (5.3.2.2) [N1204]
C12Y503/02003 . . TDP-4-oxo-6-deoxy-alpha-D-glucose-3,4-oxoisomerase (dTDP-3-dehydro-6-deoxy-alpha-D-galactopyranose-forming) (5.3.2.3) [N1204]
C12Y503/02004 . . TDP-4-oxo-6-deoxy-alpha-D-glucose-3,4-oxoisomerase (dTDP-3-dehydro-6-deoxy-alpha-D-glucopyranose-forming) (5.3.2.4) [N1204]

C12Y503/03 . transposing C=C bonds (5.3.3) [N1202]
C12Y503/03001 . . Steroid DELTA-isomerase (5.3.3.1) [N1202]

C12Y503/03002 . . Isopentenyl-diphosphate DELTA-isomerase (5.3.3.2) [N1202]
C12Y503/03003 . . Vinylacetyl-CoA DELTA-isomerase (5.3.3.3) [N1204]
C12Y503/03004 . . Muconolactone DELTA-isomerase (5.3.3.4) [N1204]
C12Y503/03005 . . Cholestenol DELTA-isomerase (5.3.3.5) [N1204]
C12Y503/03006 . . Methylitaconate DELTA-isomerase (5.3.3.6) [N1204]
C12Y503/03007 . . Aconitate DELTA-isomerase (5.3.3.7) [N1204]
C12Y503/03008 . . Dodecenoyl-CoA isomerase (5.3.3.8) [N1204]
C12Y503/03009 . . Prostaglandin-A1 DELTA-isomerase (5.3.3.9) [N1204]
C12Y503/03010 . . 5-Carboxymethyl-2-hydroxymuconate DELTA-isomerase (5.3.3.10) [N1204]
C12Y503/03011 . . Isopiperitenone DELTA-isomerase (5.3.3.11) [N1204]
C12Y503/03012 . . L-Dopachrome isomerase (5.3.3.12) [N1202]
C12Y503/03013 . . Polyenoic fatty acid isomerase (5.3.3.13) [N1204]
C12Y503/03014 . . Trans-2-decenoyl-[acyl-carrier-protein isomerase (5.3.3.14) [N1204]
C12Y503/03015 . . Ascopyrone tautomerase (5.3.3.15) [N1204]
C12Y503/03016 . . 4-Oxalomesaconate tautomerase (5.3.3.16) [N1204]
C12Y503/03017 . . Trans-2,3-dihydro-3-hydroxyanthranilate isomerase (5.3.3.17) [N1204]
C12Y503/03018 . . 2-(1,2-Epoxy-1,2-dihydrophenyl)acetyl-CoA isomerase (5.3.3.18) [N1204]

C12Y503/04 . transposing S-S bonds (5.3.4) [N1202]
C12Y503/04001 . . Protein disulfide-isomerase (5.3.4.1), i.e. disufide bond-forming enzyme [N1202]

C12Y503/99 . Other intramolecular oxidoreductases (5.3.99) [N1202]
C12Y503/99002 . . Prostaglandin-D synthase (5.3.99.2) [N1202]
C12Y503/99003 . . Prostaglandin-E synthase (5.3.99.3) [N1202]
C12Y503/99004 . . Prostaglandin-I synthase (5.3.99.4) [N1202]
C12Y503/99005 . . Thromboxane-A synthase (5.3.99.5) [N1202]
C12Y503/99006 . . Allene-oxide cyclase (5.3.99.6) [N1204]
C12Y503/99007 . . Styrene-oxide isomerase (5.3.99.7) [N1204]
C12Y503/99008 . . Capsanthin/capsorubin synthase (5.3.99.8) [N1204]
C12Y503/99009 . . Neoxanthin synthase (5.3.99.9) [N1204]

C12Y504/00 Intramolecular transferases (5.4) [N1202]

C12Y504/01 . transferring acyl groups (5.4.1) [N1204]
C12Y504/01001 . . Lysolecithin acylmutase (5.4.1.1) [N1204]
C12Y504/01002 . . Precorrin-8X methylmutase (5.4.1.2) [N1204]

C12Y504/02 . Phosphotransferases (phosphomutases) (5.4.2) [N1202]
C12Y504/02001 . . Phosphoglycerate mutase (5.4.2.1) [N1202]
C12Y504/02002 . . Phosphoglucomutase (5.4.2.2) [N1204]
C12Y504/02003 . . Phosphoacetylglucosamine mutase (5.4.2.3) [N1202]
C12Y504/02004 . . Bisphosphoglycerate mutase (5.4.2.4) [N1204]
C12Y504/02005 . . Phosphoglucomutase (glucose-cofactor) (5.4.2.5) [N1204]

C12Y504/02006 . . Beta-phosphoglucomutase (5.4.2.6) [N1204]
C12Y504/02007 . . Phosphopentomutase (5.4.2.7) [N1204]
C12Y504/02008 . . Phosphomannomutase (5.4.2.8) [N1204]
C12Y504/02009 . . Phosphoenolpyruvate mutase (5.4.2.9) [N1204]
C12Y504/02010 . . Phosphoglucosamine mutase (5.4.2.10) [N1204]

C12Y504/03 . transferring amino groups (5.4.3) [N1204]
C12Y504/03002 . . Lysine 2,3-aminomutase (5.4.3.2) [N1204]
C12Y504/03003 . . Beta-lysine 5,6-aminomutase (5.4.3.3) [N1204]
C12Y504/03004 . . D-Lysine 5,6-aminomutase (5.4.3.4) [N1204]
C12Y504/03005 . . D-Ornithine 4,5-aminomutase (5.4.3.5) [N1204]
C12Y504/03006 . . Tyrosine 2,3-aminomutase (5.4.3.6) [N1204]
C12Y504/03007 . . Leucine 2,3-aminomutase (5.4.3.7) [N1204]
C12Y504/03008 . . Glutamate-1-semialdehyde 2,1-aminomutase (5.4.3.8) [N1204]

C12Y504/04 . transferring hydroxy groups (5.4.4) [N1202]
C12Y504/04001 . . (Hydroxyamino)benzene mutase (5.4.4.1) [N1204]
C12Y504/04002 . . Isochorismate synthase (5.4.4.2) [N1202]
C12Y504/04003 . . 3-(Hydroxyamino)phenol mutase (5.4.4.3) [N1204]
C12Y504/04004 . . Geraniol isomerase (5.4.4.4) [N1204]
C12Y504/04005 . . 9,12-Octadecadienoate 8-hydroperoxide 8R-isomerase (5.4.4.5) [N1204]
C12Y504/04006 . . 9,12-Octadecadienoate 8-hydroperoxide 8S-isomerase (5.4.4.6) [N1204]

C12Y504/99 . transferring other groups (5.4.99) [N1202]
C12Y504/99001 . . Methylaspartate mutase (5.4.99.1) [N1204]
C12Y504/99002 . . Methylmalonyl-CoA mutase (5.4.99.2) [N1202]
C12Y504/99003 . . 2-Acetolactate mutase (5.4.99.3) [N1204]
C12Y504/99004 . . 2-Methyleneglutarate mutase (5.4.99.4) [N1204]
C12Y504/99005 . . Chorismate mutase (5.4.99.5) [N1202]
C12Y504/99007 . . Lanosterol synthase (5.4.99.7), i.e. oxidosqualene-lanosterol cyclase [N1202]
C12Y504/99008 . . Cycloartenol synthase (5.4.99.8) [N1204]
C12Y504/99009 . . UDP-galactopyranose mutase (5.4.99.9) [N1202]
C12Y504/99011 . . Isomaltulose synthase (5.4.99.11) [N1202]
C12Y504/99012 . . tRNA pseudouridine38-40 synthase (5.4.99.12) [N1202]
C12Y504/99013 . . Isobutyryl-CoA mutase (5.4.99.13) [N1204]
C12Y504/99014 . . 4-Carboxymethyl-4-methylbutenolide mutase (5.4.99.14) [N1204]
C12Y504/99015 . . (1->4)-Alpha-D-glucan 1-alpha-D-glucosylmutase (5.4.99.15) [N1204]
C12Y504/99016 . . Maltose alpha-D-glucosyltransferase (5.4.99.16) [N1202]
C12Y504/99017 . . Squalene--hopene cyclase (5.4.99.17) [N1204]
C12Y504/99018 . . 5-(Carboxyamino)imidazole ribonucleotide mutase (5.4.99.18) [N1204]
C12Y504/99019 . . 16S rRNA pseudouridine516 synthase (5.4.99.19) [N1204]
C12Y504/99020 . . 23S rRNA pseudouridine2457 synthase (5.4.99.20) [N1204]
C12Y504/99021 . . 23S rRNA pseudouridine2604 synthase (5.4.99.21) [N1204]

C12Y504/99022 . . 23S rRNA pseudouridine2605 synthase (5.4.99.22) [N1204]
C12Y504/99023 . . 23S rRNA pseudouridine1911/1915/1917 synthase (5.4.99.23) [N1204]
C12Y504/99024 . . 23S rRNA pseudouridine955/2504/2580 synthase (5.4.99.24) [N1204]
C12Y504/99025 . . tRNA pseudouridine55 synthase (5.4.99.25) [N1204]
C12Y504/99026 . . tRNA pseudouridine65 synthase (5.4.99.26) [N1204]
C12Y504/99027 . . tRNA pseudouridine13 synthase (5.4.99.27) [N1204]
C12Y504/99028 . . tRNA pseudouridine32 synthase (5.4.99.28) [N1204]
C12Y504/99029 . . 23S rRNA pseudouridine746 synthase (5.4.99.29) [N1204]
C12Y504/99030 . . UDP-arabinopyranose mutase (5.4.99.30) [N1204]
C12Y504/99031 . . Thalianol synthase (5.4.99.31) [N1204]
C12Y504/99032 . . Protostadienol synthase (5.4.99.32) [N1204]
C12Y504/99033 . . Cucurbitadienol synthase (5.4.99.33) [N1204]
C12Y504/99034 . . Germanicol synthase (5.4.99.34) [N1204]
C12Y504/99035 . . Taraxerol synthase (5.4.99.35) [N1204]
C12Y504/99036 . . Isomultiflorenol synthase (5.4.99.36) [N1204]
C12Y504/99037 . . Dammaradiene synthase (5.4.99.37) [N1204]
C12Y504/99038 . . Camelliol C synthase (5.4.99.38) [N1204]
C12Y504/99039 . . Beta-amyrin synthase (5.4.99.39) [N1204]
C12Y504/99040 . . Alpha-amyrin synthase (5.4.99.40) [N1204]
C12Y504/99041 . . Lupeol synthase (5.4.99.41) [N1204]
C12Y504/99042 . . tRNA pseudouridine31 synthase (5.4.99.42) [N1204]
C12Y504/99043 . . 21S rRNA pseudouridine2819 synthase (5.4.99.43) [N1204]
C12Y504/99044 . . Mitochondrial tRNA pseudouridine27/28 synthase (5.4.99.44) [N1204]
C12Y504/99045 . . tRNA pseudouridine38/39 synthase (5.4.99.45) [N1204]
C12Y504/99046 . . Shionone synthase (5.4.99.46) [N1204]
C12Y504/99047 . . Parkeol synthase (5.4.99.47) [N1204]
C12Y504/99048 . . Achilleol B synthase (5.4.99.48) [N1204]
C12Y504/99049 . . Glutinol synthase (5.4.99.49) [N1204]
C12Y504/99050 . . Friedelin synthase (5.4.99.50) [N1204]
C12Y504/99051 . . Baccharis oxide synthase (5.4.99.51) [N1204]
C12Y504/99052 . . Alpha-seco-amyrin synthase (5.4.99.52) [N1204]
C12Y504/99053 . . Marneral synthase (5.4.99.53) [N1204]
C12Y504/99054 . . Beta-seco-amyrin synthase (5.4.99.54) [N1204]
C12Y504/99055 . . Delta amyrin synthase (5.4.99.55) [N1204]
C12Y504/99056 . . Tirucalladienol synthase (5.4.99.56) [N1204]

C12Y505/00 **Intramolecular lyases (5.5)** [N1202]

C12Y505/01 . Intramolecular lyases (5.5.1) [N1202]
C12Y505/01001 . . Muconate cycloisomerase (5.5.1.1) [N1204]
C12Y505/01002 . . 3-Carboxy-cis,cis-muconate cycloisomerase (5.5.1.2) [N1204]
C12Y505/01003 . . Tetrahydroxypteridine cycloisomerase (5.5.1.3) [N1204]

C12Y505/01004 . . Inositol-3-phosphate synthase (5.5.1.4) [N1202]
C12Y505/01005 . . Carboxy-cis,cis-muconate cyclase (5.5.1.5) [N1204]
C12Y505/01006 . . Chalcone isomerase (5.5.1.6) [N1202]
C12Y505/01007 . . Chloromuconate cycloisomerase (5.5.1.7) [N1204]
C12Y505/01008 . . Bornyl diphosphate synthase (5.5.1.8) [N1204]
C12Y505/01009 . . Cycloeucalenol cycloisomerase (5.5.1.9) [N1204]
C12Y505/01010 . . Alpha-pinene-oxide decyclase (5.5.1.10) [N1204]
C12Y505/01011 . . Dichloromuconate cycloisomerase (5.5.1.11) [N1204]
C12Y505/01012 . . Copalyl diphosphate synthase (5.5.1.12) [N1204]
C12Y505/01013 . . Ent-copalyl diphosphate synthase (5.5.1.13) [N1204]
C12Y505/01014 . . Syn-copalyl-diphosphate synthase (5.5.1.14) [N1204]
C12Y505/01015 . . Terpentedienyl-diphosphate synthase (5.5.1.15) [N1204]
C12Y505/01016 . . Halimadienyl-diphosphate synthase (5.5.1.16) [N1204]
C12Y505/01017 . . (S)-Beta-macrocarpene synthase (5.5.1.17) [N1204]
C12Y505/01018 . . Lycopene epsilon-cyclase (5.5.1.18) [N1204]
C12Y505/01019 . . Lycopene beta-cyclase (5.5.1.19) [N1204]
C12Y505/01020 . . Prosolanapyrone-III cycloisomerase (5.5.1.20) [N1204]

C12Y599/00 **Other isomerases (5.99)** [N1202]

C12Y599/01 . Other isomerases (5.99.1) [N1202]
C12Y599/01001 . . Thiocyanate isomerase (5.99.1.1) [N1204]
C12Y599/01002 . . DNA topoisomerase (5.99.1.2) [N1202]
C12Y599/01003 . . DNA topoisomerase (ATP-hydrolysing) (5.99.1.3) [N1202]
C12Y599/01004 . . 2-Hydroxychromene-2-carboxylate isomerase (5.99.1.4) [N1204]

C12Y600/00 **Ligases (6.)** [N1202]

C12Y601/00 **Ligases forming carbon-oxygen bonds (6.1)** [N1202]

C12Y601/01 . Ligases forming aminoacyl-tRNA and related compounds (6.1.1) [N1202]
C12Y601/01001 . . Tyrosine-tRNA ligase (6.1.1.1) [N1202]
C12Y601/01002 . . Tryptophan-tRNA ligase (6.1.1.2) [N1202]
C12Y601/01003 . . Threonine-tRNA ligase (6.1.1.3) [N1202]
C12Y601/01004 . . Leucine--tRNA ligase (6.1.1.4) [N1204]
C12Y601/01005 . . Isoleucine-tRNA ligase (6.1.1.5) [N1202]
C12Y601/01006 . . Lysine-tRNA ligase (6.1.1.6) [N1202]
C12Y601/01007 . . Alanine--tRNA ligase (6.1.1.7) [N1204]
C12Y601/01009 . . Valine--tRNA ligase (6.1.1.9) [N1204]
C12Y601/01010 . . Methionine-tRNA ligase (6.1.1.10) [N1202]
C12Y601/01011 . . Serine--tRNA ligase (6.1.1.11) [N1204]
C12Y601/01012 . . Aspartate-tRNA ligase (6.1.1.12) [N1202]

C12Y601/01013 . . D-Alanine--poly(phosphoribitol) ligase (6.1.1.13) [N1204]
C12Y601/01014 . . Glycine-tRNA ligase (6.1.1.14) [N1202]
C12Y601/01015 . . Proline--tRNA ligase (6.1.1.15) [N1204]
C12Y601/01016 . . Cysteine-tRNA ligase (6.1.1.16) [N1202]
C12Y601/01017 . . Glutamate-tRNA ligase (6.1.1.17) [N1202]
C12Y601/01018 . . Glutamine--tRNA ligase (6.1.1.18) [N1204]
C12Y601/01019 . . Arginine--tRNA ligase (6.1.1.19) [N1204]
C12Y601/01020 . . Phenylalanine-tRNA ligase (6.1.1.20) [N1202]
C12Y601/01021 . . Histidine-tRNA ligase (6.1.1.21) [N1202]
C12Y601/01022 . . Asparagine-tRNA ligase (6.1.1.22) [N1202]
C12Y601/01023 . . Aspartate--tRNA(Asn) ligase (6.1.1.23) [N1204]
C12Y601/01024 . . Glutamate--tRNA(Gln) ligase (6.1.1.24) [N1204]
C12Y601/01025 . . Lysine--tRNA(Pyl) ligase (6.1.1.25) [N1204]
C12Y601/01026 . . Pyrrolysine-tRNAPyl ligase (6.1.1.26) [N1202]
C12Y601/01027 . . O-Phosphoserine--tRNA ligase (6.1.1.27) [N1204]

C12Y601/02 . Acid--alcohol ligases (ester synthases) (6.1.2) [N1204]
C12Y601/02001 . . D-Alanine--(R)-lactate ligase (6.1.2.1) [N1204]

C12Y602/00 Ligases forming carbon-sulfur bonds (6.2) [N1202]

C12Y602/01 . Acid-Thiol Ligases (6.2.1) [N1202]
C12Y602/01001 . . Acetate-CoA ligase (6.2.1.1) [N1202]
C12Y602/01002 . . Butyrate-CoA ligase (6.2.1.2) [N1202]
C12Y602/01003 . . Long-chain-fatty-acid-CoA ligase (6.2.1.3) [N1202]
C12Y602/01004 . . Succinate-CoA ligase (GDP-forming) (6.2.1.4) [N1202]
C12Y602/01005 . . Succinate-CoA ligase (ADP-forming) (6.2.1.5) [N1202]
C12Y602/01006 . . Glutarate--CoA ligase (6.2.1.6) [N1204]
C12Y602/01007 . . Cholate--CoA ligase (6.2.1.7) [N1204]
C12Y602/01008 . . Oxalate--CoA ligase (6.2.1.8) [N1204]
C12Y602/01009 . . Malate--CoA ligase (6.2.1.9) [N1204]
C12Y602/01010 . . Acid--CoA ligase (GDP-forming) (6.2.1.10) [N1204]
C12Y602/01011 . . Biotin--CoA ligase (6.2.1.11) [N1204]
C12Y602/01012 . . 4-Coumarate-CoA ligase (6.2.1.12) [N1202]
C12Y602/01013 . . Acetate--CoA ligase (ADP-forming) (6.2.1.13) [N1204]
C12Y602/01014 . . 6-Carboxyhexanoate--CoA ligase (6.2.1.14) [N1204]
C12Y602/01015 . . Arachidonate--CoA ligase (6.2.1.15) [N1204]
C12Y602/01016 . . Acetoacetate-CoA ligase (6.2.1.16) [N1202]
C12Y602/01017 . . Propionate--CoA ligase (6.2.1.17) [N1204]
C12Y602/01018 . . Citrate--CoA ligase (6.2.1.18) [N1204]
C12Y602/01019 . . Long-chain-fatty-acid--luciferin-component ligase (6.2.1.19) [N1204]
C12Y602/01020 . . Long-chain-fatty-acid--[acyl-carrier-protein ligase (6.2.1.20) [N1204]
C12Y602/01022 . . [Citrate (pro-3S)-lyase ligase (6.2.1.22) [N1204]

C12Y602/01023 . . Dicarboxylate--CoA ligase (6.2.1.23) [N1204]
C12Y602/01024 . . Phytanate--CoA ligase (6.2.1.24) [N1204]
C12Y602/01025 . . Benzoate--CoA ligase (6.2.1.25) [N1204]
C12Y602/01026 . . O-Succinylbenzoate-CoA ligase (6.2.1.26) [N1202]
C12Y602/01027 . . 4-Hydroxybenzoate--CoA ligase (6.2.1.27) [N1204]
C12Y602/01028 . . 3-Alpha,7-alpha-dihydroxy-5-beta-cholestanate--CoA ligase (6.2.1.28) [N1204]
C12Y602/01030 . . Phenylacetate--CoA ligase (6.2.1.30) [N1204]
C12Y602/01031 . . 2-Furoate--CoA ligase (6.2.1.31) [N1204]
C12Y602/01032 . . Anthranilate--CoA ligase (6.2.1.32) [N1204]
C12Y602/01033 . . 4-Chlorobenzoate--CoA ligase (6.2.1.33) [N1204]
C12Y602/01034 . . Trans-feruloyl-CoA synthase (6.2.1.34) [N1204]
C12Y602/01035 . . ACP-SH:acetate ligase (6.2.1.35) [N1204]
C12Y602/01036 . . 3-Hydroxypropionyl-CoA synthase (6.2.1.36) [N1204]
C12Y602/01037 . . 3-Hydroxybenzoate--CoA ligase (6.2.1.37) [N1204]

C12Y603/00 Ligases forming carbon-nitrogen bonds (6.3) [N1202]

C12Y603/01 . Acid-ammonia (or amine) ligases (amide synthases) (6.3.1) [N1202]
C12Y603/01001 . . Aspartate--ammonia ligase (6.3.1.1) [N1204]
C12Y603/01002 . . Glutamate-ammonia ligase (6.3.1.2) [N1202]
C12Y603/01004 . . Aspartate--ammonia ligase (ADP-forming) (6.3.1.4) [N1204]
C12Y603/01005 . . NAD+ synthase (6.3.1.5) [N1202]
C12Y603/01006 . . Glutamate--ethylamine ligase (6.3.1.6) [N1204]
C12Y603/01007 . . 4-Methyleneglutamate--ammonia ligase (6.3.1.7) [N1204]
C12Y603/01008 . . Glutathionylspermidine synthase (6.3.1.8) [N1204]
C12Y603/01009 . . Trypanothione synthase (6.3.1.9) [N1204]
C12Y603/01010 . . Adenosylcobinamide-phosphate synthase (6.3.1.10) [N1204]
C12Y603/01011 . . Glutamate--putrescine ligase (6.3.1.11) [N1204]
C12Y603/01012 . . D-Aspartate ligase (6.3.1.12) [N1204]
C12Y603/01013 . . L-Cysteine:1D-myo-inositol 2-amino-2-deoxy-alpha-D-glucopyranoside ligase (6.3.1.13) [N1204]
C12Y603/01014 . . Diphthine--ammonia ligase (6.3.1.14) [N1204]

C12Y603/02 . Acid—amino-acid ligases (peptide synthases) (6.3.2) [N1202]
C12Y603/02001 . . Pantoate-beta-alanine ligase (6.3.2.1) [N1202]
C12Y603/02002 . . Glutamate-cysteine ligase (6.3.2.2) [N1202]
C12Y603/02003 . . Glutathione synthase (6.3.2.3) [N1202]
C12Y603/02004 . . D-Alanine-D-alanine ligase (6.3.2.4) [N1202]
C12Y603/02005 . . Phosphopantothenate--cysteine ligase (6.3.2.5) [N1204]
C12Y603/02006 . . Phosphoribosylaminoimidazolesuccinocarboxamide synthase (6.3.2.6) [N1202]
C12Y603/02007 . . UDP-N-acetylmuramoyl-L-alanyl-D-glutamate--L-lysine ligase (6.3.2.7) [N1204]
C12Y603/02008 . . UDP-N-acetylmuramate-L-alanine ligase (6.3.2.8) [N1202]
C12Y603/02009 . . UDP-N-acetylmuramoyl-L-alanine-D-glutamate ligase (6.3.2.9) [N1202]

C12Y603/02010 . . UDP-N-acetylmuramoyl-tripeptide-D-alanyl-D-alanine ligase (6.3.2.10) [N1202]
C12Y603/02011 . . Carnosine synthase (6.3.2.11) [N1204]
C12Y603/02012 . . Dihydrofolate synthase (6.3.2.12) [N1204]
C12Y603/02013 . . UDP-N-acetylmuramoyl-L-alanyl-D-glutamate-2,6-diaminopimelate ligase (6.3.2.13) [N1202]
C12Y603/02014 . . 2,3-Dihydroxybenzoate--serine ligase (6.3.2.14) [N1204]
C12Y603/02016 . . D-Alanine--alanyl-poly(glycerolphosphate) ligase (6.3.2.16) [N1204]
C12Y603/02017 . . Tetrahydrofolate synthase (6.3.2.17) [N1204]
C12Y603/02018 . . Gamma-glutamylhistamine synthase (6.3.2.18) [N1204]
C12Y603/02019 . . Ubiquitin-protein ligase (6.3.2.19), i.e. ubiquitin-conjugating enzyme [N1202]
C12Y603/02020 . . Indoleacetate--lysine synthetase (6.3.2.20) [N1204]
C12Y603/02021 . . Ubiquitin--calmodulin ligase (6.3.2.21) [N1204]
C12Y603/02023 . . Homoglutathione synthase (6.3.2.23) [N1202]
C12Y603/02024 . . Tyrosine--arginine ligase (6.3.2.24) [N1204]
C12Y603/02025 . . Tubulin-tyrosine ligase (6.3.2.25) [N1202]
C12Y603/02026 . . N-(5-Amino-5-carboxypentanoyl)-L-cysteinyl-D-valine synthase (6.3.2.26) [N1204]
C12Y603/02027 . . Aerobactin synthase (6.3.2.27) [N1204]
C12Y603/02028 . . L-Amino-acid alpha-ligase (6.3.2.28) [N1204]
C12Y603/02029 . . Cyanophycin synthase (L-aspartate-adding) (6.3.2.29) [N1204]
C12Y603/02030 . . Cyanophycin synthase (L-arginine-adding) (6.3.2.30) [N1204]
C12Y603/02031 . . Coenzyme F420-0:L-glutamate ligase (6.3.2.31) [N1204]
C12Y603/02032 . . Coenzyme gamma-F420-2:alpha-L-glutamate ligase (6.3.2.32) [N1204]
C12Y603/02033 . . Tetrahydrosarcinapterin synthase (6.3.2.33) [N1204]
C12Y603/02034 . . Coenzyme F420-1:gamma-L-glutamate ligase (6.3.2.34) [N1204]
C12Y603/02035 . . D-Alanine--D-serine ligase (6.3.2.35) [N1204]
C12Y603/02036 . . 4-Phosphopantoate--beta-alanine ligase (6.3.2.36) [N1204]
C12Y603/02037 . . UDP-N-acetylmuramoyl-L-alanyl-D-glutamate--D-lysine ligase (6.3.2.37) [N1204]

C12Y603/03 . Cyclo-ligases (6.3.3) [N1204]
C12Y603/03001 . . Phosphoribosylformylglycinamidine cyclo-ligase (6.3.3.1) [N1204]
C12Y603/03002 . . 5-Formyltetrahydrofolate cyclo-ligase (6.3.3.2) [N1204]
C12Y603/03003 . . Dethiobiotin synthase (6.3.3.3) [N1204]
C12Y603/03004 . . (Carboxyethyl)arginine beta-lactam-synthase (6.3.3.4) [N1204]

C12Y603/04 . Other carbon-nitrogen ligases (6.3.4) [N1202]
C12Y603/04001 . . GMP synthase (6.3.4.1) [N1202]
C12Y603/04002 . . CTP synthase (6.3.4.2) [N1204]
C12Y603/04003 . . Formate--tetrahydrofolate ligase (6.3.4.3) [N1204]
C12Y603/04004 . . Adenylosuccinate synthase (6.3.4.4) [N1202]
C12Y603/04005 . . Argininosuccinate synthase (6.3.4.5) [N1202]
C12Y603/04006 . . Urea carboxylase (6.3.4.6) [N1204]
C12Y603/04007 . . Ribose-5-phosphate--ammonia ligase (6.3.4.7) [N1204]
C12Y603/04008 . . Imidazoleacetate--phosphoribosyldiphosphate ligase (6.3.4.8) [N1204]

C12Y603/04009 . . Biotin--[methylmalonyl-CoA-carboxytransferase ligase (6.3.4.9) [N1204]
C12Y603/04010 . . Biotin--[propionyl-CoA-carboxylase (ATP-hydrolyzing) ligase (6.3.4.10) [N1204]
C12Y603/04011 . . Biotin--[methylcrotonoyl-CoA-carboxylase ligase (6.3.4.11) [N1204]
C12Y603/04012 . . Glutamate--methylamine ligase (6.3.4.12) [N1204]
C12Y603/04013 . . Phosphoribosylamine-glycine ligase (6.3.4.13) [N1202]
C12Y603/04014 . . Biotin carboxylase (6.3.4.14) [N1202]
C12Y603/04015 . . Biotin-[acetyl-CoA-carboxylase] ligase (6.3.4.15) [N1202]
C12Y603/04016 . . Carbamoyl-phosphate synthase (ammonia) (6.3.4.16) [N1202]
C12Y603/04017 . . Formate--dihydrofolate ligase (6.3.4.17) [N1204]
C12Y603/04018 . . 5-(Carboxyamino)imidazole ribonucleotide synthase (6.3.4.18) [N1204]
C12Y603/04019 . . tRNA(Ile)-lysidine synthetase (6.3.4.19) [N1204]

C12Y603/05 . Carbon-nitrogen ligases with glutamine as amido-N-donor (6.3.5) [N1202]
C12Y603/05001 . . NAD+ synthase (glutamine-hydrolyzing) (6.3.5.1) [N1204]
C12Y603/05002 . . GMP synthase (glutamine-hydrolysing) (6.3.5.2), i.e. glutamine amidotransferase [N1202]
C12Y603/05003 . . Phosphoribosylformylglycinamidine synthase (6.3.5.3) [N1204]
C12Y603/05004 . . Asparagine synthase (glutamine-hydrolyzing) (6.3.5.4) [N1204]
C12Y603/05005 . . Carbamoyl-phosphate synthase (glutamine-hydrolysing) (6.3.5.5) [N1202]
C12Y603/05006 . . Asparaginyl-tRNA synthase (glutamine-hydrolyzing) (6.3.5.6) [N1204]
C12Y603/05007 . . Glutaminyl-tRNA synthase (glutamine-hydrolyzing) (6.3.5.7) [N1204]
C12Y603/05009 . . Hydrogenobyrinic acid a,c-diamide synthase (glutamine-hydrolyzing) (6.3.5.9) [N1204]
C12Y603/05010 . . Adenosylcobyric acid synthase (glutamine-hydrolyzing) (6.3.5.10) [N1204]
C12Y603/05011 . . Cobyrinate a,c-diamide synthase (glutamine-hydrolyzing) (6.3.5.11) [N1204]

C12Y604/00 Ligases forming carbon-carbon bonds (6.4) [N1202]

C12Y604/01 . Ligases forming carbon-carbon bonds (6.4.1) [N1202]
C12Y604/01001 . . Pyruvate carboxylase (6.4.1.1) [N1202]
C12Y604/01002 . . Acetyl-CoA carboxylase (6.4.1.2) [N1202]
C12Y604/01003 . . Propionyl-CoA carboxylase (6.4.1.3) [N1202]
C12Y604/01004 . . Methylcrotonoyl-CoA carboxylase (6.4.1.4) [N1204]
C12Y604/01005 . . Geranoyl-CoA carboxylase (6.4.1.5) [N1204]
C12Y604/01006 . . Acetone carboxylase (6.4.1.6) [N1204]
C12Y604/01007 . . 2-Oxoglutarate carboxylase (6.4.1.7) [N1204]
C12Y604/01008 . . Acetophenone carboxylase (6.4.1.8) [N1204]

C12Y605/00 Ligases forming phosphoric ester bonds (6.5) [N1202]

C12Y605/01 . forming phosphoric ester bonds (6.5.1) [N1204]
C12Y605/01001 . . DNA ligase (ATP) (6.5.1.1) [N1204]
C12Y605/01002 . . DNA ligase (NAD+) (6.5.1.2) [N1204]

C12Y605/01003 . . RNA ligase (ATP) (6.5.1.3) [N1204]
C12Y605/01004 . . RNA-3'-phosphate cyclase (6.5.1.4) [N1204]

C12Y606/00 Ligases forming nitrogen-metal bonds (6.6) [N1202]

C12Y606/01 . forming coordination complexes (6.6.1) [N1204]
C12Y606/01001 . . Magnesium chelatase (6.6.1.1) [N1204]
C12Y606/01002 . . Cobaltochelatase (6.6.1.2) [N1204]