

ECLA**EUROPEAN CLASSIFICATION****C12Q****MEASURING OR TESTING PROCESSES INVOLVING ENZYMES OR MICRO-ORGANISMS ([immunoassay G01N33/53](#)); COMPOSITIONS OR TEST PAPERS THEREFOR; PROCESSES OF PREPARING SUCH COMPOSITIONS; CONDITION RESPONSIVE CONTROL IN MICROBIOLOGICAL OR ENZYMOLOGICAL PROCESSES****Notes**

1. This subclass does not cover the observation of the progress or of the result of processes specified in this subclass by any of the methods specified in groups [G01N3/00](#) to [G01N29/00](#), which is covered by subclass G01N.
2. In this subclass, the following expression is used with the meaning indicated:
 - o "involving", when used in relation to a substance, includes the testing for the substance as well as employing the substance as a determinant or reactant in a test for a different substance.
3. Attention is drawn to Notes (1) to (3) following the title of class C12.
4. In this subclass, test media are classified in the appropriate group for the relevant test process.

[N: Notes

1. Documents describing the use of an electrode for analysis of a specific analyte are classified in [C12Q1/00B](#) or subgroups and not according to the last place rule
2. Documents relating to new peptides, e.g. enzymes, or new DNA or its corresponding mRNA, encoding for the peptides, and their use in measuring or testing processes are classified in subclass C07K or in group [C12N9/00](#) according to the peptides, with the appropriate indexing codes relating to their use in diagnostics. However where the new nucleic acids are principally used in diagnostic processes, e.g. PCR, hybridisation reactions, the documents are also classified in group [C12Q1/68](#)
3. When classifying in groups [C12Q1/68](#) to [C12Q1/70](#) it is desirable to classify with symbols from groups [M12Q500/00](#) to [M12Q599/00](#), relating to relevant technical features of the invention, using Combination Sets.
4. In groups [C12Q1/68M](#)- [C12Q1/68M10F](#) and [C12Q1/70](#)- [C12Q1/70B8](#) it is desirable to add the indexing codes [M12Q600/00](#) to [M12Q600/178](#) which reflect the use of the product in combination with the virus groups only if the application refers to products.

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C12Q1/00

Measuring or testing processes involving enzymes, [N: nucleic acids] or micro-organisms ([measuring or testing apparatus with condition measuring or sensing means, e.g. colony counters C12M1/34](#)); Compositions therefor; Processes of preparing such compositions [C9511]

C12Q1/00B

. [N: Enzyme electrodes]

C12Q1/00B2

. . [N: Electrode membranes]

- C12Q1/00B2B . . . [N: Functionalisation]
- C12Q1/00B4 . . [N: mediator-assisted]
- C12Q1/00B6 . . [N: involving specific analytes or enzymes (including groups of enzymes, e.g. oxydases; [C12Q1/00B4](#) takes precedence)]
- C12Q1/00B6B . . . [N: for glucose]

- C12Q1/00D . [N: involving isoenzyme profiles (for detection of an individual isoenzyme [C12Q1/25](#) to [C12Q1/66](#))]

- C12Q1/00F . [N: for determining co-enzymes or co-factors, e.g. NAD, ATP]

- C12Q1/02 . involving viable micro-organisms
- C12Q1/02B . . [N: for testing or evaluating the effect of chemical or biological compounds, e.g. drugs, cosmetics (antimicrobial activity [C12Q1/18](#))]
- C12Q1/04 . . Determining presence or kind of micro-organism; Use of selective media for testing antibiotics or bacteriocides; Compositions containing a chemical indicator therefor [N: ([C12Q1/68P](#) takes precedence)]
- C12Q1/04B . . . [N: Culture media therefor] [N9608]
- C12Q1/06 . . . Quantitative determination
- C12Q1/08 using multifield media
- C12Q1/10 . . . Enterobacteria
- C12Q1/12 . . . Nitrate to nitrite reducing bacteria
- C12Q1/14 . . . Streptococcus; Staphylococcus
- C12Q1/16 . . . using radioactive material
- C12Q1/18 . . Testing for antimicrobial activity of a material
- C12Q1/20 . . . using multifield media
- C12Q1/22 . . Testing for sterility conditions
- C12Q1/24 . . Methods of sampling, or inoculating or spreading a sample; Methods of physically isolating an intact micro-organisms

- C12Q1/25 . involving enzymes not classifiable in groups [C12Q1/26](#) [N: to [C12Q1/66](#)] [C9603]

- C12Q1/26 . involving oxidoreductase
- C12Q1/28 . . involving peroxidase
- C12Q1/30 . . involving catalase
- C12Q1/32 . . involving dehydrogenase

- C12Q1/34 . involving hydrolase
- C12Q1/37 . . involving peptidase or proteinase
- C12Q1/40 . . involving amylase
- C12Q1/42 . . involving phosphatase
- C12Q1/44 . . involving esterase
- C12Q1/46 . . . involving cholinesterase

- C12Q1/48 . involving transferase
- C12Q1/48B . . [N: involving kinase] [N0107]
- C12Q1/50 . . involving creatine phosphokinase

- C12Q1/52 . . involving transaminase
 - C12Q1/527 . involving lyase
 - C12Q1/533 . involving isomerase
 - C12Q1/54 . involving glucose or galactose
 - C12Q1/56 . involving blood clotting factors, e.g. involving thrombin, thromboplastin, fibrinogen
 - C12Q1/58 . involving urea or urease
 - C12Q1/60 . involving cholesterol
 - C12Q1/61 . involving triglycerides
 - C12Q1/62 . involving uric acid
 - C12Q1/64 . Geomicrobiological testing, e.g. for petroleum
 - C12Q1/66 . involving luciferase
 - C12Q1/68 . involving nucleic acids
- [N: **Note**
 [N9603]In subgroups of [C12Q1/68](#), classification is made according to the most relevant feature rather than according to the last-place-rule
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- C12Q1/68A . . [N: General aspects (not used, see subgroups)] [N9511]
 - C12Q1/68A2 . . . [N: Nucleic acid analysis utilising immunogens] [N9511]
 - C12Q1/68A4 . . . [N: Preparing nucleic acids for analysis, e.g. for PCR assay ([C12Q1/68A2](#) takes precedence)] [N9511]
 - C12Q1/68A6 . . . [N: Sequence identification involving differential detection] [N9603]
 - C12Q1/68A8 . . . [N: Selection methods for production or design of target specific oligonucleotide or binding molecules] [N9606]
 - C12Q1/68B . . [N: Hybridisation assays]
 - C12Q1/68B2 . . . [N: characterised by the means of detection ([C12Q1/68A2](#) takes precedence)] [C9511]
 - C12Q1/68B2B [N: involving interaction of at least two labels, e.g. resonant energy transfer] [N9511]
 - C12Q1/68B2D [N: Signal amplification] [N9511]
 - C12Q1/68B2F [N: Release of bound marker] [N9511]
 - C12Q1/68B2H [N: Nucleic acid detection involving sensors] [N9511]
 - C12Q1/68B6 . . . [N: for mutation or polymorphism detection]
 - C12Q1/68B6A [N: involving restriction enzymes, e.g. RFLP]
 - C12Q1/68B8 . . . [N: Enhancement of hybridisation reaction]
 - C12Q1/68B10 . . . [N: Nucleic acid analysis involving immobilisation; Immobilisation characterised by the carrier or coupling agent] [N9511]
 - C12Q1/68B10A [N: characterised by the use of probe arrays or probe chips ([C12Q1/68E4](#)

- takes precedence)] [N9610]
- C12Q1/68B12 . . . [N: Triple helix formation in hybridisation assays] [N9511]
 - C12Q1/68B14 . . . [N: "In-situ" hybridisation] [N9511]
 - C12Q1/68D . . [N: Nucleic acid amplification reactions] [N9511]
 - C12Q1/68D2 . . . [N: Common amplification features] [N9511]
 - C12Q1/68D2A [N: preventing contamination] [N9511]
 - C12Q1/68D2C [N: Quantitative amplification] [N9511]
 - C12Q1/68D2E [N: using modified primers or templates] [N9511] [C9603]
 - C12Q1/68D2E1 [N: Ligating adaptors] [N9603]
 - C12Q1/68D2G [N: Allele specific amplification] [N9511]
 - C12Q1/68D4 . . . [N: Polymerase Chain Reaction (PCR)] [N9511]
 - C12Q1/68D6 . . . [N: Ligase Chain Reaction (LCR)] [N9511]
 - C12Q1/68D8 . . . [N: Promoter based amplification, e.g. NASBA, 3SR, TAS] [N9511]
 - C12Q1/68D10 . . . [N: Replicase based amplifications, e.g. Q-beta replicase] [N9511]
 - C12Q1/68E . . [N: Methods for sequencing]
 - C12Q1/68E2 . . . [N: involving mass spectrometry] [N9610]
 - C12Q1/68E4 . . . [N: involving nucleic acid arrays, e.g. Sequencing By Hybridisation (SBH)] [N9610]
 - C12Q1/68M . . [N: Hybridisation probes]
 - C12Q1/68M2 . . . [N: for sex determination]
 - C12Q1/68M4 . . . [N: for tissue and cell typing, e.g. HLA probes] [C9511]
 - C12Q1/68M6 . . . [N: for diseases caused by alterations of genetic material] [C9511]
 - C12Q1/68M6B [N: for cancer]
 - C12Q1/68M10 [N: for detection or identification of organisms]
 - C12Q1/68M10B [N: for bacteria]
 - C12Q1/68M10D [N: for protozoa]
 - C12Q1/68M10F [N: for plants, fungi, or algae]
 - C12Q1/68P . . [N: involving reporter genes operably linked to promoters] [C9511]
 - C12Q1/70 . . involving virus or bacteriophage
 - C12Q1/70B . . [N: Specific hybridization probes]
 - C12Q1/70B2 . . . [N: for retroviruses]
 - C12Q1/70B2B [N: Viruses associated with AIDS]
 - C12Q1/70B4 . . . [N: for herpetoviridae, e.g. herpes simplex, varicella zoster]
 - C12Q1/70B6 . . . [N: for hepatitis]
 - C12Q1/70B6A [N: non-A, non-B Hepatitis, excluding hepatitis D]
 - C12Q1/70B8 . . . [N: for papilloma]

C12Q3/00 Condition responsive control processes (apparatus therefor [C12M1/36](#); controlling or regulating in general [G05](#))