Cystic fibrosis

Devyser CFTR Core Plus

Discover the advantages

- Designed for CFTR testing in European populations
- Detects normal and mutant alleles
- Determination of intron 9 (IVS8) poly-T and TG repeat number
- Built-in ID markers enable cross-mix sample identity confirmation
- Cost-effective solution with less hands-on time required
- Fully compliant with the German EBM standard

A complete CFTR kit for first level mutation screening

The Devyser CFTR Core Plus 1.1 kit is based on multiplex allele-specific PCR amplification for detection of normal, non-mutated and mutated alleles in the CFTR gene. Allele-specific PCR amplification generates fluorescently labelled fragments that are analyzed by capillary electrophoresis. Amplified fragments are identified based on size and fluorescent labels. The Devyser CFTR Core Plus 1.1 kit is designed to genotype the normal and mutant alleles at 39 loci of the CFTR gene using purified human genomic DNA. Genotype coverage includes a panel of 44 mutations to support genetic diversity of multiethnic European populations. The assay also detects poly-thymidine variants (5T/7T/9T) within intron 9 (IVS8) of the CFTR gene. In case of a 5T allele, the TG repeat number upstream of the poly-T region can also be determined. Devyser CFTR Core Plus 1.1 is fully compliant with the German EBM standard and detects all 31 specified mutations.

Cystic fibrosis and CFTR

Mutations in the CFTR gene may cause cystic fibrosis (CF). One in 25 people of European descent carries a mutated CFTR allele and one in every 2,000-3,000 newborns is found to be affected by CF. CFTR mutation testing can be used as an aid in newborn screening, CF diagnosis and reproductive decisions, enabling clinicians to determine if an abnormal diagnostic result is due to a mutation within the CFTR gene. Other disorders related to CFTR dysfunction include male infertility caused by CBAVD and acute recurrent or chronic pancreatitis.

Cystic fibrosis molecular diagnostics

More than 2,000 mutations and variants in the CFTR gene have been described. The vast majority of mutations have a population frequency below 0.1 % with high heterogeneity of mutation distribution between different ethnic groups. The Devyser CFTR Core kit has been designed to detect the most common mutations found across populations of European origin.

Technical specifications

Intended use:
Qualitative genotyping of a panel of normal and mutated alleles in the cystic fibrosis transmembrane conductance regulator (CFTR) gene in human genomic DNA

For research use only

Compatible Genetic Analysers:
Thermo Fisher's capillary electrophoresis instruments: ABI 310, ABI 3130, ABI 3500, ABI 3730

Ready to use for PCR

Kit size:
48 tests

Article number:
Devyser Core Plus 1.1
8-A041.1

DNA Size marker:
560 SIZER ORANGE

Mutations detected:
CFTRdele2,3(21kb), 621+1G>T, 711+1G>T, 1078delT, 1677delTA, 1717-1G>A, 1898+1G>A, 2043delG, 2143delT, 2183AA>G, 2184delA, 2184insA, 2789+5G>A, 3120+1G>A, 3272-26A>G, 3659delC, 3849+10kbC>T, 3905insT, E60X, G85E, E92X, E92K, R117C, R117H, R334W, I336K, T338I, R347H, R347P, A455E, I507del, F508del, G542X, G551D, R553X, R560T, L1065P, R1066C, L1077P, Y1092X(C>A), M1101K, R1162X, W1282X, N1303K, IVS8: 5T (TG9-13), 7T, 9T

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Devyser. Results for life.

We're specialists in diagnostic kits for complex DNA testing within oncology, reproductive health and hereditary diseases. Our products are used to guide targeted cancer therapies, to enable rapid prenatal diagnostics, as well as in a wide array of genetic tests. We have a guiding principle when it comes to developing products that are ideal for routine diagnostics: make the technology simple, reproducible and less prone to user-generated errors. And this is precisely what our customers appreciate about us, which is why routine diagnostic laboratories in more than 50 countries worldwide use our products.

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