Devyser UPD-15

Key advantages of the Devyser UPD-15 kit:

- Nine (9) tetra-repeat STR-markers for tracing the transmission of chromosome 15
- Control STR-markers on separate chromosomes facilitate exclusion of maternal cell contamination
- Control STR-markers allow built-in sample identification of the proband, maternal and paternal samples
- Cost-effective solution with less hands-on time required

Uniparental Disomy (UPD)

Devyser

Uniparental disomy (UPD) occurs when a person receives two copies of a chromosome, or part of a chromosome, from one parent and no copies from the other parent. Maternal and paternal UPD-15 represent the most frequently observed UPDs. Patients with maternal UPD-15 suffer from Prader-Willi syndrome (PWS) whereas patients with paternal UPD-15 suffer from Angelman syndrome (AS). Chromosome 15 UPD testing is relevant in various prenatal diagnostic conditions including apparent confined placental mosaicism, homologous and non-homologous Robertsonian translocations and as genomic biomarker for detecting chromosome origin. The assessment of UPD is performed using informative STR-markers to trace the transmission of chromosome 15 from each parent to the child in order to determine whether the child demonstrates normal biparental inheritance, or uniparental inheritance. UPD analysis requires samples from the child/proband and both parents. All cases positive for UPD should be confirmed for stipulated paternity.

The Devyser UPD-15 diagnostic kit

Devyser UPD-15 relies on amplification of tetra nucleotide STRmarkers in order to minimize formation of stutter bands and thereby Maternal (upper), proband (middle) and paternal (lower) samples analysed together using Devyser UPD-15. The highlighted allele is inherited from the father. No allele is inherited from the mother

simplifying results interpretation. Reducing stutter is especially important when two alleles from the individuals investigated are close in size. Devyser UPD-15 also includes STR-markers on chromosomes 13 and 18 to facilitate the exclusion of maternal contamination by absence of non-inherited maternal alleles in the proband sample. Moreover, detection of maternally and paternally inherited fetal alleles from chromosomes 13 and 18 allows built-in sample identification of the proband, maternal and paternal samples. Four out of nine STR-markers that are specific for chromosome 15 are located within the 15q11-13 deletion region.



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Technical Specification

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Intended Use	The Devyser UPD-15 kit is an in vitro diagnostic product for detection of uniparental disomy of chromosome 15 (UPD-15)
CE -labelled for IVD use	Yes
Complies with Best Practice guide- lines for UPD15 diagnosis	Yes
Total number of markers	 Totally 12 genetic markers: Nine tetra repeat STR-markers specific for chromosome 15. Two internal control STR-markers located on separate chromosomes One sex determining marker.
Compatible Genetic Analysers:	ABI/Life Technologies Capillary electrophoresis instruments: 310, 3100, 3130, 3500, 3730
Reaction volume	25 µL
DNA input	10 – 20 ng / PCR reaction for optimal results
Ready to use for PCR	Yes
Kit size	25 test
Article id	8-A016

About Devyser

Devyser AB is specialized in the development, manufacturing and sales of diagnostic kits and reagents based on DNA analytical procedures, including PCR.

Devyser AB operates under strict quality control protocols and has an ISO13485:2012 (medical device) certification. Products are CE-labelled according to IVDD 98/79/EC for use in in-vitro diagnostic procedures. The main areas of application for our products are prenatal diagnostics and clinical genetics.

