

Devyser Thalassemia for NGS

Discover the advantages

- One simple assay for all thalassemia genetic testing needs
- Single tube NGS analysis of mutations causing both alpha and beta-thalassemia
- Detects both SNVs and deletions in the HBA1, HBA2 and HBB genes
- Simple, fast and robust NGS workflow - NGS has never been easier
- Optimized data analysis software

Genetic Testing for Thalassemias

Alpha and beta-thalassemia are severe forms of anemia. Alpha-thalassemia is most often caused by deletions in one or both HBA genes, while the major cause of beta-thalassemia is single nucleotide variants (SNVs) in the HBB gene.

One Assay for all Testing Needs

Devyser Thalassemia detects all mutations in HBA1, HBA2 and HBB including SNVs, Indels and CNVs. It is optimized to be used for both large scale mutation screening and advanced second level genetic testing. The fast, simple and robust NGS workflow replaces time consuming multi-step protocols and the need for maintaining several different assays in your lab.

Devyser's proprietary PCR chemistry provides complete and uniform coverage of the targeted regions. It also enables a high level of overlapping amplicon multiplexing, which results in a unique NGS library preparation process with no sample splitting. This simplifies the workflow, reduces the risk of contamination and minimizes the potential for sample mix-up.

To enable sensitive and reliable detection of known deletions, direct detection using primers aligned to both ends of the breakpoint is implemented for 17 large deletions with high prevalence. Simultaneously, sequence-coverage based CNV analysis confirms the detected deletions and identifies other deletions in the targeted region.

Data Analysis

Laboratories have a choice of tailored analytical software solutions, locally deployed or cloud-based.

Devyser. Results for life.

Devyser is specialized in the development, manufacture and sales of diagnostic kits for complex DNA testing within Oncology, Reproductive Health and Hereditary Diseases. The products are used to guide targeted cancer therapies, to enable rapid prenatal diagnostics as well as in a wide array of genetic tests. Devyser's product development focuses on simplifying and streamlining complex testing processes to improve throughput, reduce hands-on time and produce accurate and trusted results.



Product Details

The Devyser Thalassemia kit enables analysis of sequence variants in the HBA1, HBA2 and HBB genes in human genomic DNA.

Research Use Only

Assay Principle:

Amplicon based targeted library preparation for NGS

Compatible NGS Instruments:

Illumina MiSeq®, Illumina Mini-Seq®

Contact sales@devyser.com for latest list of compatible instruments.

Ready to use.

Article number:

Devyser Thalassemia
8-A106-24 (24 tests)
8-A106-48 (48 tests)
Devyser Library Clean
8-A204

Procedures Included in Assay:

- Targeted library preparation
- Sample indexing
- Sample clean-up and pooling
- Data analysis pipeline (optional)

Contact

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DEVYSER THALASSEMIA

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Genes covered (HBA1, HBA2, HBB)

1

Assay for SNVs, Indels and CNVs

10 ng

Input DNA required

17

Direct detections of known deletions

<45

Minutes hands-on time

<5

Hours total process time

64

Number of amplicons

202

Average target amplicon length

10 kB

Total target size

Illumina®

Platform

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