



Assay Technologies Ltd.



APIS DPYD HT qPCR Kit

The APIS DPYD HT qPCR Kit is designed for fast and efficient detection of seven *DPYD* alleles. Each reaction identifies both wildtype (WT) and variant alleles, directly from blood or extracted genomic DNA (gDNA). The kit's rapid turnaround time, cost-effectiveness, and easy integration into existing qPCR workflows makes it a reliable and accessible option for a variety of research applications.

Advantages of the APIS DPYD HT qPCR Kit



Wide target coverage – detects seven *DPYD* variants



Direct workflow – compatible with both 1% EDTA Whole Blood and gDNA



High throughput – 4 reactions per sample supports efficient research testing



Reliable HapB3 detection – targets key functional HapB3 variant

Variants detected by the APIS DPYD HT qPCR Kit

The APIS DPYD HT qPCR Kit enables the qualitative detection of specific *DPYD* gene variants using a high throughput, multiplexed real-time PCR format. The kit provides a scalable and efficient solution for detecting these variants in various research settings.

Table 1: Variants detected by the APIS DPYD HT qPCR Kit

Variant (NM_000110.4)	rsID
c.1905+1G>A	rs3918290
c.1679T>G	rs55886062
c.1129-5923C>G	rs75017182
c.557A>G	rs115232898
c.2846A>T	rs67376798
c.868A>G	rs146356975
c.2279C>T	rs112766203

APIS DPYD HT qPCR Kit shows excellent concordance with alternative research genotyping methods

gDNA extracted from 29 specimens with known *DPYD* variant status (characterised via NGS, microarrays or qPCR), Sereq DPYD DNA Mutation Mix (SeraCare, Cat. No. 0750-9502) and one synthetic DNA sample for each variant were assessed with the APIS DPYD HT qPCR Kit.

Table 2: Concordance of the APIS DPYD HT qPCR Kit with other research genotyping methods

Variant (NM_000110.4)	N° Homozygous Wildtype samples tested	N° Heterozygous samples tested	N° Homozygous Variant samples tested*	N° of correctly genotyped samples
c.1905+1G>A	24	5	2	31/31
c.1679T>G	27	3	1	31/31
c.1129-5923C>G	23	6	2	31/31
c.557A>G	24	6	1	31/31
c.2846A>T	24	6	1	31/31
c.868A>G	26	4	1	31/31
c.2279C>T	24	6	1	31/31

*One of which was the Sereq DNA mutation mix, *One synthetic DNA per variant tested

APIS DPYD HT qPCR Kit Specifications

The kit has undergone testing as part of APIS unique RUO assay development pipeline, including both *in silico* and wet laboratory testing. As a result, researchers can depend on the kit for consistent and high-quality detection of *DPYD* variants. A positive and negative control (PC and NTC), which monitor assay set up and assay performance, are also supplied with the kit.

Format	8 Tubes: 4 PP mixes (Primer-Probes), 2 Enzyme mixes, 1 Positive Control, 1 Negative Control
PCR Method	qPCR
Turnaround Time	< 2 hours per PCR plate
Hands-on Time	< 1 hours per PCR plate
Intended Sample Type	Extracted gDNA (e.g. from whole blood) or 1% EDTA whole blood
Instrument	Any qPCR instrument with compatible cycling and emission detection capabilities (FAM™, HEX™, ATTO™550, ROX)

APIS DPYD HT qPCR Kit Ordering Information

Assay Name	Test Type	Kit Size	Catalogue Number	Price
APIS DPYD HT qPCR Kit	RUO	24 samples plus controls	04201	Available upon request

All scientific and analytical information in this brochure comes from the APIS DPYD HT qPCR Kit Handbook ART0201.

The APIS DPYD HT qPCR Kit is intended for Research Use Only (RUO). Not for use in diagnostic procedures.