

# Technical Product Report

*For Research Use Only; Not for use in Diagnostic Procedures*

Product Description:	Seraseq® DPYD DNA Mutation Mix		
Material Number:	0750-9502	Batch Number:	10711252
Material Description:	Mixture of purified DNA constructs of DPYD variants and genomic DNA from GM24385 cells at 50% target allele frequency		
Fill Volume:	20 µL		
Date of Manufacture:	24 JUN 2024	Expiration Date:	24 JUN 2028
Storage:	-20°C		
Concentration (Invitrogen™ Qubit™ 1X dsDNA BR Assay):	Nominal value: 30 ng/µL Average measured value: 38.53 ng/µL		
dPCR Test Method:	QIAGEN QIAcuity® Digital PCR System		
NGS Assay Test Method:	Targeted DPYD gene sequencing using the "Dihydropyrimidine dehydrogenase deficiency (5-fluorouracil toxicity). Sequencing of DPYD gene – 1 gene. Ref.: S-202212057" assay (HealthCode, Inc). 200 ng of Seraseq® DPYD DNA Mutation Mix was used as input.		

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Nucleotide change	Protein change	AF% dPCR	AF% NGS <sup>1</sup>
c.61C>T	p.R21*	53.19	58.88
c.299_302del	p.F100Sfs	53.65	54.83
c.483+18G>A	N/A	54.04	61.96
c.496A>G	p.M166V	52.11	55.65
c.557A>G	p.Y186C	52.11	55.05
c.601A>C	p.S201R	52.11	52.85
c.632A>G	p.Y211C	52.11	50.99
c.680+139G>A	N/A	52.11	62.00**
c.703C>T	p.R235W	45.97	45.39
c.704G>A	p.R235Q	40.01	42.73
c.868A>G	p.K290E	53.03	61.41
c.959-51T>C	N/A	53.46	57.00**
c.1003G>T	p.V335L	53.46	55.28
c.1024G>A	p.D342N	53.46	55.58
c.1057C>T	p.R353C	53.46	55.67
c.1129-5923C>G	N/A	52.15	55.68
c.1156G>T	p.E386*	52.80	59.25
c.1236G>A	p.E412E	52.80	56.35
c.1314T>G	p.F438L	52.80	56.86
c.1475C>T	p.S492L	54.36	61.64

Nucleotide Change	Protein Change	AF% dPCR	AF% NGS <sup>1</sup>
c.1484A>G	p.D495G	54.36	61.42
c.1601G>A	p.S534N	50.41	58.49
c.1627A>G	p.I543V	50.41	59.66
c.1679T>G	p.I560S	50.41	57.44
c.1777G>A	p.G593R	45.00	48.01
c.1896T>C	p.F632F	45.00	49.62
c.1775G>A	p.R592Q	40.54	41.25
c.1898delC	p.P633fs	40.54	37.40
c.1905+1G>A	p.IVS14	40.54	37.83
c.1974+75A>G	N/A	54.59	69.00**
c.2021G>A	p.G674D	52.33	58.37
c.2194G>A	p.V732I	53.89	58.92
c.2279C>T	p.T760I	53.89	58.40
c.2639G>T	p.G880V	54.92	54.56
c.2657G>A	p.R886H	54.92	56.10
c.2846A>T	p.D949V	54.86	58.40
c.2872A>G	p.K958E	54.86	57.44
c.2933A>G	p.H978R	53.79	60.58
c.2983G>T	p.V995F	53.79	59.32

<sup>1</sup>NGS was performed as an orthogonal verification step. \*\*Variants included in detection range and not included in annotation range defined in the test (alignment information is available upon request).

**DPYD variants identified in the GM24385 background:**

Gene	Nucleotide change	Protein change	AF% dPCR	AF% NGS*
DPYD	c.1129-15T>C	N/A	N/A	18.7
	c.85T > C	p.C29R	N/A	100

Approval:

*Sanchita Jaminder*

10 SEP 2024

Prepared By

Date