

Technical Product Report

For Research Use Only; Not for use in Diagnostic Procedures

Product Description: Seraseq™ Inherited Cancer DNA Mix v1

Material No: 0730-0003

Batch Number: 10247796

Material Description: This purified DNA product combines over 20 variants in a well-characterized genomic background at a 50% target allele frequency. It is a reference material for targeted NGS assays and can be used for assay development, analytical validation or routine assay QC.

Date of Manufacture: 13-MAR-2017

Expiration Date: 13-MAR-2019

Biosynthetic constructs bearing variant of interest for increased cancer risk were sequenced bidirectionally using Sanger technology to verify mutation.

Test Method: Digital PCR was used to verify the biosynthetic constructs were mixed with wild type genomic DNA at approximately 50% variant allele frequency (50% \pm 5%).

Gene ID	Mutation Type	HGVS Nomenclature	Sequence Verified	Variant Allele Frequency
BRCA2	Deletion	NM_000059.3:c.8975_9100del	Pass	Pass
BRCA2	Deletion	NM_000059.3:c.1310_1313del	Pass	Pass
BRCA2	Duplication	NM_000059.3:c.1813dupA	Pass	Pass
BRCA2	Insertion	NM_000059.3:c.9342_9343insAluY	Pass	Pass
BRCA1	Duplication	NM_007294.3:c.5266dupC	Pass	Pass
BRCA1	Deletion	NM_007294.3:c.5177_5180del	Pass	Pass
BRCA1	Deletion	NM_007294.3:c.3756_3759del	Pass	Pass
BRCA1	Deletion	NM_007294.3:c.3481_3491del	Pass	Pass
BRCA1	Substitution	NM_007294.3:c.3113A>G	Pass	Pass
BRCA1	Deletion	NM_007294.3:c.3084_3094del	Pass	Pass
BRCA1	Deletion-Insertion	NM_007294.3:c.2834_2836delinsC	Pass	Pass
BRCA1	Deletion	NM_007294.3:c.68_69del	Pass	Pass
MSH2	Substitution	NM_000251.2:c.942+3A>T	Pass	Pass
MSH2	Deletion	NM_000251.2:c.1662-12_1677del	Pass	Pass
MSH6	Deletion-Insertion	NM_000179.2:c.2056_2060delinsCTTCTACCTCAAAAA	Pass	Pass
MSH6	Insertion	NM_000179.2:c.2308_2312delinsT	Pass	Pass
MSH6	Deletion-Insertion	NM_000179.2:c.2641delinsAAAA	Pass	Pass
MSH6	Duplication	NM_000179.2:c.3163dupG	Pass	Pass
MLH1	Deletion	NM_000249.3:c.1852_1854del	Pass	Pass
MLH1	Deletion-Insertion	NM_000249.3:c.232_243delinsATGTAAGG	Pass	Pass

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PMS2	Deletion	NM_000535.5:c.2243_2246del	Pass	Pass
PMS2	Deletion	NM_000535.5:c.861_864del	Pass	Pass
CDKN2A	Insertion	NM_000077.4:c.9_32dup24	Pass	Pass

Approval:

Caltherine Huang
Prepared By

27 AUG 2018
Date