Technical Product Report

For Research Use Only; Not for use in Diagnostic Procedures

Product Description:	Seraseq® gDNA TMB Mix Score 13		
Material Number:	0710-1586	Batch Number:	10670472
Material Description:	Reference standard made from a mutagenized reference cell line (GM24385) and its matched "normal" cell line. Genomic DNA was extracted, purified, and characterized for tumor mutational burden.		
Fill Size:	10 µL		
Date of Manufacture:	31 MAY 2023	Expiration Date:	18 MAY 2024
Concentration Test Method:	Qubit dsDNA BR Assay		
Concentration:	Seraseq gDNA TMB Score 13 (Tumor): 124 ng/µL Seraseq gDNA TMB Score 13 (WT): 135 ng/µL		
Whole Exome Sequencing (WES) Method & Analysis:	• Library preparation o Agilent SureSelectXT Human AllExon V6 + COSMIC (enrichment kit) o Capture Region = 32.4 Mb o DNA input = 1 µg / run • Whole Exome Sequencing o ILMN NovaSeq 6000 o Average read depth ~300X (tumor) and ~100X (normal) • TMB Analysis Pipeline metrics and parameters (Based on FoCR TMB harmonization algorithm[1]) o TMB variants = missense, nonsense, frameshift, in-frame insertion, in-frame deletion o FILTER=PASS; AF≥0.05; tDP≥25; AO≥3 o Aligner = bwa mem o Mutation Detection = Mutect2 (tumor-normal mode) o Mutation Annotation = SnpEff o Mutation Filtration = SnpSift		
TMB Score by WES:	12.57 ± 0.02 (average and standard deviation of three replicates)		

[1] https://meetinglibrary.asco.org/record/172797/abstract

Approval:

Prepared By

06 JUN 2023
Date