

## **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: 10594025		
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:	24 NOV 2021 Expiration Date: 18 MAY 2023		
Concentration Test Method:	Qubit dsDNA BR Assay		
Concentration:	Seraseq gDNA TMB Score 13 (Tumor): 52.7 ng/µL Seraseq gDNA TMB Score 13 (WT): 52.9 ng/µL		
Whole Exome Sequencing (WES) Method & Analysis:	<ul> <li>Library preparation         <ul> <li>Agilent SureSelectXT Human AllExon V6 + COSMIC (enrichment kit)</li> <li>Capture Region = 32.4 Mb</li> <li>DNA input = 1 μg / run</li> </ul> </li> <li>Whole Exome Sequencing         <ul> <li>ILMN NovaSeq 6000</li> <li>Average read depth ~300X (tumor) and ~100X (normal)</li> </ul> </li> <li>TMB Analysis Pipeline metrics and parameters (Based on FoCR TMB harmonization algorithm¹)         <ul> <li>TMB variants = missense, nonsense, frameshift, in-frame insertion, in-frame deletion</li> <li>FILTER=PASS; AF≥0.05; tDP≥25; AO≥3</li> <li>Aligner = bwa mem</li> <li>Mutation Detection = Mutect2 (tumor-normal mode)</li> <li>Mutation Annotation = SnpEff</li> <li>Mutation Filtration = SnpSift</li> </ul> </li> </ul>		
TMB Score by WES:	12.57 ± 0.02 (average and standard deviation of three replicates)		

<sup>&</sup>lt;sup>1</sup>https://meetinglibrary.asco.org/record/172797/abstract

Approval:		
	29 NOU 2021	
Prepared By	Date	