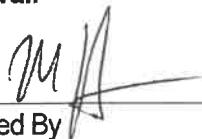


# Technical Product Report

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

Product Description:	Seraseq gDNA TMB Mix Score 20		
Material Number:	0710-1324	Batch Number:	10721342
Material Description:	Reference standard made from a human lung cancer cell line and its matched "normal" cell line generated from peripheral blood of the same patient. Genomic DNA was extracted, purified, and characterized for tumor mutational burden.		
Fill Volume:	10 µL		
Date of Manufacture:	19 SEP 2024	Expiration Date:	19 SEP 2028
Nominal Concentration:	50 ng/µL		
Concentration Test Method:	Qubit dsDNA BR Assay		
Measured Concentration:	Seraseq gDNA TMB Score 20 (Tumor): 51.4 ng/µL Seraseq gDNA TMB Score 20 (WT): 55.9 ng/µL		
Whole Exome Sequencing (WES) Method & Analysis:	<ul style="list-style-type: none"> <li>• Library preparation               <ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>○ ILMN NovaSeq 6000</li> <li>○ Average read depth ~300x (tumor) and ~100X (normal)</li> <li>○ Other relevant QC parameters</li> </ul> </li> <li>• TMB Analysis Pipeline metrics and parameters (Based on FoCR TMB algorithm)               <ul style="list-style-type: none"> <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:	20.6 (average of 1 WES measurements)		

**Approval:**



Prepared By

23 SEP 2024

Date