

## **Technical Product Report**

For Research Use Only; Not for use in Diagnostic Procedures

Product Description:	Seraseq® FFPE TMB RM Score 20
Material Number:	0710-1309 Batch Number: 10408721
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. Cells were mixed at 30% tumor, fixed with 10% formalin, and embedded in paraffin.
Fill Size:	2x10 µm FFPE curls
Date of Manufacture:	04 APR 2019 Expiration Date: 04 APR 2021
Extraction and Concentration Test Method:	QIAamp DNA FFPE Tissue Kit for extraction and Qubit dsDNA HS Assay for concentration.
Measured Yield per Curl:	Seraseq FFPE TMB RM Score 20: 256 ng
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 = 750 ng / run</li> </ul> </li> <li>Whole Exome Sequencing         <ul> <li>ILMN NovaSeq 6000</li> <li>Average read depth ~182X</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:	18.6 ± 0.5 (average and standard deviation of three replicates)

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

Approval:

Prepared By

26 NOV 2019

Date