

# Revised Technical Product Report

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

Product Description: Seraseq® gDNA TMB Reference Panel Mix

Material Number: 0710-2463                      Batch Number: 10615103

Material Description: Reference standards made from a mutagenized lymphoblastoid cell line and its matched “normal” cell line. Genomic DNA was extracted, purified, and characterized for tumor mutational burden.

Fill Volume: 20 µL per vial

Date of Manufacture: 05 MAY 2022                      Expiration Date: 05 MAY 2025

Concentration Test Method: Qubit ds DNA BR Assay

Nominal Concentration: 25 ng/µL

**Whole Exome Sequencing (WES) Method & Analysis**

TMB Analysis Pipeline metrics and parameters are based on FoCR TMB harmonization algorithm.<sup>1</sup>

- TMB Variants = missense, nonsense, frameshift, in-frame insertion, in-frame deletion
- FILTER=PASS; AF≥0.05; tDP≥25; AO≥3
- Aligner = bwa mem
- Mutation Detection = Mutect2 (tumor-normal mode)
- Mutation Annotation = SnpEff
- Mutation Filtration = SnpSift

Kit Component	Measured Concentration (ng/µL)	TMB Score by WES
Seraseq gDNA TMB Ref. Mix, Score 0	31.3	N/A
Seraseq gDNA TMB Ref. Mix, Score 5	30.8	3.30
Seraseq gDNA TMB Ref. Mix, Score 10	31.7	9.94
Seraseq gDNA TMB Ref. Mix, Score 30	30.5	28.91
Seraseq gDNA TMB Ref. Mix, Score 50	31.8	51.87

**Approval:**



21 MAY 2024

Prepared By

Date

<sup>1</sup> <https://jitc.bmj.com/content/8/1/e000147.full>