

Seraseq® FFPE TMB RM Score 7, 9, 20, 26

0710-1307, 0710-1308, 0710-1309, 0710-1310

This Product Datasheet provides further details around the TMB assessment protocol method as well as the whole exome sequencing (WES) and targeted NGS panel data for the Seraseq FFPE TMB RM products.

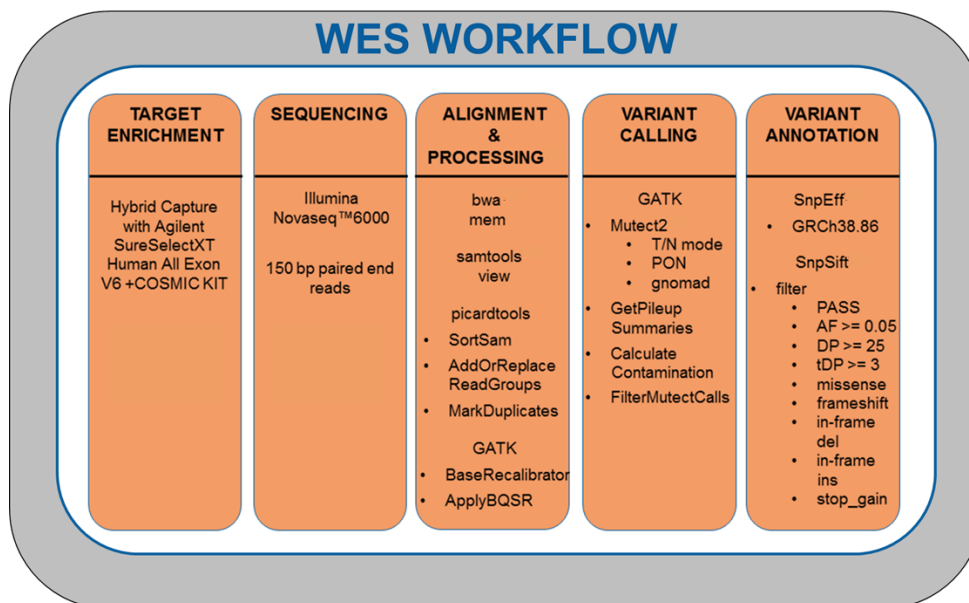
TMB MATERIALS

- Human cell-lines; fixed and paraffin-embedded (FFPE)
- 4x FFPE TMB reference materials
- 30% tumor cellularity at 10 µm FFPE curls

TMB MEASUREMENTS BY WHOLE EXOME SEQUENCING (WES)

- Library preparation
 - Agilent SureSelectXT Human AllExon V6 + COSMIC (enrichment kit)
 - Capture region = 32.4 Mb
- Whole Exome Sequencing
 - ILMN NovaSeq 6000
 - Average read depth ~200x
 - Other relevant QC parameters
- TMB Analysis Pipeline (Based on FoCR's TMB Harmonization Project¹)

$$\text{TMB Score} = \frac{\text{\# of Non-synonymous TMB mutations}}{32.4}$$



¹ Merino, D., et al., Poster #268, 2019 ASCO Meeting, Chicago, USA; <https://meetinglibrary.asco.org/record/172797/abstract>

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WHOLE EXOME SEQUENCING DATA

- TMB Scores generated using above parameters & filters are shown in Table 1.

Table-1: WES-derived TMB scores for Seraseq FFPE TMB reference materials

FFPE TMB Reference Standard	TMB Scores*
Seraseq® FFPE TMB RM Score 7	7.15 ± 0.42
Seraseq® FFPE TMB RM Score 9	7.52 ± 1.27
Seraseq® FFPE TMB RM Score 20	18.59 ± 0.50
Seraseq® FFPE TMB RM Score 26	22.81 ± 3.61

*Average TMB scores from 3 replicate WES measurements

TMB variant lists (WES data) available by contacting us at seracaremarketing@seracare.com

TARGETED NGS PANEL DATA

- Targeted NGS panel-based TMB scores have been generated for the Seraseq FFPE TMB reference standards and results compared to WES data (see Figure-1) below.

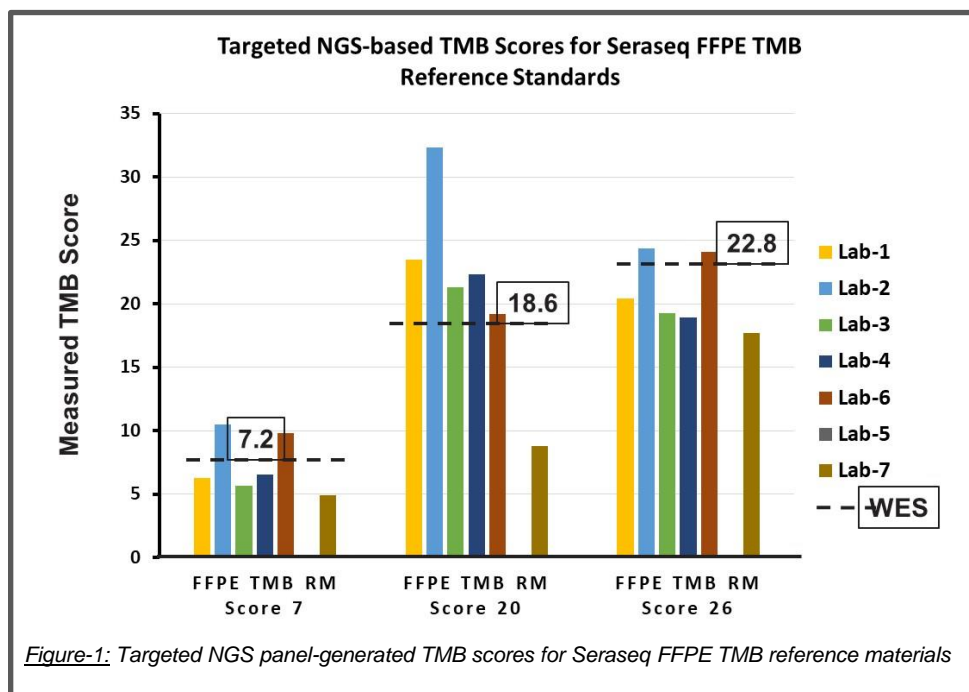


Figure-1: Targeted NGS panel-generated TMB scores for Seraseq FFPE TMB reference materials

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- Targeted NGS panel-based TMB measurements were generated by the following collaborators:
 - A. Memorial Sloan Kettering Cancer Center
 - B. The Broad Institute
 - C. Illumina, Inc.
 - D. Sema4 Genomics
 - E. Neo New Oncology GmbH
 - F. Intermountain Precision Genomics
 - G. Medical College of Georgia @ Augusta University

CONTACT US

- For additional information on these TMB reference standards, please visit our dedicated product page at <https://www.seracare.com/tumor-mutational-burden/>, or call us at **+1-800-676-1881**.



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