

# Technical Product Report

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

Product Description: Seraseq® Cardiomyopathy Reference Material

Material Number: 0740-0021      Batch Number: 10671719

Material Description: This purified DNA product combines ten variants in a well-characterized genomic background at a 50% target allele frequency. It is a reference material for targeted NGS assays and can be used for assay development, analytical validation or routine assay QC.

Date of Manufacture: 23 JUN 2023      Expiration Date: 03 APR 2026

Concentration (Qubit dsDNA BR Assay): Nominal: 50 ng/μL      Actual: 51 ng/μL

Fill Volume: 200 μL

Test Method for Allele Frequency: Digital PCR was used to verify the biosynthetic mutant sequences were mixed with wild type genomic DNA at approximately 50% variant allele frequency.

Measured Variant Allele Frequency: 47%

Test Method: A biosynthetic construct bearing variants of interest for cardiomyopathy were sequenced bidirectionally using Sanger technology to verify mutations.

Name	Mutation Type	Sanger Sequence Verified
MYBPC3 c.1504C>T	SNV	Pass
MYBPC3 c.2373_2374insG	Small insertion	Pass
MYBPC3 c.3628-41_3628-17del	Large Deletion (in repetitive region)	Pass
MYH7 c.1988G>A	SNV	Pass
MYH7 c.1357C>T	SNV	Pass
MYH7 c.1750G>C	SNV	Pass
TNNI3 c.532_534delAAG	Small Deletion	Pass
TNNI3 c.575G>A	SNV	Pass
TNNT2 c.487_489delGAG	Deletion in highly repetitive region	Pass
TPM1 c.574G>A	SNV	Pass

**Approval:**



14 JUL 2023

Prepared By

Date