

# Technical Product Report

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

Product Description: Seraseq™ ctDNA Mutation Mix v2 AF0.125%

Material No: 0710-0143

Batch No: 10321440

Material Description: Mixture of human genomic DNA from the reference cell line, GM24385, and synthetic DNA constructs

Date of Manufacture: 13Apr2018

Expiration Date: 13Apr2020

Concentration (Qubit dsDNA BR Assay): 15.8 ng/μL

Volume: 25 μL

Storage: -20 °C

Digital PCR testing using BioRad QX200™ Droplet Digital™ PCR System:

Gene ID	COSMIC Identifier	AF%
AKT1	COSM33765	0.16
APC	COSM13127	0.18
APC	COSM18561	0.11
ATM	COSM21924	0.16
BRAF	COSM476	0.14
CTNNB1	COSM5664	0.17
EGFR	COSM6224	0.17
EGFR	COSM12378	0.18
EGFR	COSM6225	0.12
EGFR	COSM6240	0.18
ERBB2	COSM682/20959	0.14
FGFR3	COSM715	0.12
FLT3	COSM783	0.13
FOXL2	COSM33661	0.14
GNA11	COSM52969	0.15
GNAQ	COSM28758	0.20
GNAS	COSM27887	0.20
IDH1	COSM28747	0.19
JAK2	COSM12600	0.12
KIT	COSM1314	0.13
KRAS	COSM521	0.15
MPL	COSM18918	0.14
NCOA4-RET	N/A	0.13
NPM1	COSM17559	0.10
NRAS/CSDE1	COSM584	0.21
PDGFRA	COSM736	0.14
PDGFRA	COSM28053	0.14
PIK3CA	COSM763	0.13
PIK3CA	COSM12464	0.13
PIK3CA	COSM775	0.17
PTEN	COSM4986	0.10
PTEN	COSM5809	0.10
RET	COSM965	0.14
SMAD4	COSM14105	0.18
TP53	COSM10648	0.20
TP53	COSM10660	0.16
TP53	COSM10662	0.20
TP53	COSM6530	0.14
TP53	COSM18610	Not Tested <sup>1</sup>
TPR-ALK	N/A	0.13

<sup>1</sup> NGS testing alone is used for QC of variant COSM18610.

Next Generation Sequencing  
 testing using Archer® Reveal  
 ctDNA™ 28 Kit run on an Illumina®  
 MiSeq™:

Gene	COSMIC Identifier	AF% <sup>2</sup>
AKT1	COSM33765	NMD
BRAF	COSM476	0.11
CTNNB1	COSM5664	0.10
EGFR	COSM6225	0.13
EGFR	COSM12378	NMD
EGFR	COSM6240	0.17
EGFR	COSM6224	NMD
ERBB2	COSM20959	0.12
IDH1	COSM28747	0.19
KIT	COSM1314	0.15
KRAS	COSM521	0.11
NRAS	COSM584	0.24
PDGFRA	COSM28053	0.11
PDGFRA	COSM736	0.13
PIK3CA	COSM763	0.12
PIK3CA	COSM775	0.10
PIK3CA	COSM12464	NMD
RET	COSM965	0.21
TP53	COSM10660	NMD
TP53	COSM10662	0.20
TP53	COSM6530	NMD
TP53	COSM10648	0.22
TP53	COSM18610	0.20

<sup>2</sup> NMD = No Mutation Detected. Results presented in this table represent a single QC test run. Variants listed as NMD here were successfully detected in other rounds of QC testing. Stochastic failures are expected for this 0.125% allele frequency tier under the run conditions that were used for QC testing of Seraseq ctDNA Mutation Mix v2.

Approval:



Prepared By

18 Apr 2018

Date