

Certificate of Analysis

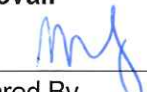

For Research Use Only
Not for Use in Diagnostic Procedures

Product Description: Seraseq™ Tumor Mutation DNA Mix v2 AF10, RUO
 Material No: 0710-0094 Batch No: 10455789
 Volume: 25 µL Concentration: 25 ng/µL
 Date of Manufacture: 23 SEP 2019 Expiration Date: 23 SEP 2021
 Test Method for Concentration: Qubit dsDNA BR Assay
 Average Concentration (ng/µL): 30.0 ng/µL
 Test Method for Variant Allele Frequency: In house validated, allele specific, digital PCR assays

Mutation	Average dPCR Allele Frequency
AKT1 COSM33765	9.4
APC COSM13127	10.8
APC COSM18561	9.3
ATM COSM21924	11.6
BRAF COSM476	9.7
CTNNB COSM5664	11.3
EGFR COSM6224	11.3
EGFR COSM6225	10.9
EGFR COSM6240	9.9
EGFR COSM12378	9.9
ERBB2 COSM682	8.1
FGFR3 COSM715	9.7
FLT3 COSM783	9.4
FOXL2 COSM33661	10.0
GNA11 COSM52969	11.1
GNAQ COSM28758	10.1
GNAS COSM27887	9.8
IDH1 COSM28747	9.4
JAK2 COSM12600	9.1
KIT COSM1314	9.4

Mutation	Average dPCR Allele Frequency
KRAS COSM521	8.3
MPL COSM18918	9.8
NPM1 COSM17559	8.9
NRAS COSM584	10.0
PDGFRA COSM736	9.0
PDGFRA COSM28053	10.7
PIK3CA COSM763	9.2
PIK3CA COSM775	8.8
PIK3CA COSM12464	8.9
PTEN COSM4986	9.8
PTEN COSM5809	9.8
RET COSM965	9.1
SMAD4 COSM14105	8.5
TP53 COSM6530	9.0
TP53 COSM10660	9.0
TP53 COSM10662	8.7
TP53 COSM10648	9.2
TP53 COSM18610	NA
NCOA4-RET	9.1
TPR-ALK	9.0

Approval:

Prepared By 
 QA Verified By 

07 NOV 2019

Date

07 NOV 2019

Date