

## Seraseq Compromised FFPE Tumor DNA Reference Material

HIGHLY MULTIPLEXED FFPE REFERENCE MATERIAL FOR NGS-BASED ASSAY DEVELOPMENT, VALIDATION AND CLINICAL TESTING

#### INTRODUCTION

Comprehensive genomic profiling (CGP) is an important part of an integrated clinical management of cancer patients, where cancer patients harboring variants/biomarkers of clinical utility are determined by highly multiplexed targeted NGS assay testing. Precise analysis of these patient samples requires high quality sample-to-result assay workflow controls to guide and validate the accurate identification of these actionable variants.

LGC SeraCare has developed a highly multiplexed Compromised FFPE Tumor DNA reference material imbibing "patient-like" characteristics to support end-to-end NGS workflows performed by clinical labs in the analysis of cancer patient samples. This product consists of 17 genes and 34 variants, incorporating all variant types – SNVs, INDELs, CNVs, and SVs. These variants were precisely quantitated by digital PCR and targeted NGS against a single well-characterized genomic background (GM24385).

### HIGHLIGHTS

SINGLE-SAMPLE,
MULTIPLEXED FORMAT;
PATIENT-LIKE SAMPLE
PERFORMANCE

ALL CANCER DISEASE
ACTIONABLE VARIANTS;
ALL VARIANT TYPES
— SNVs, INDELs, CNVs,
SVs; dPCR AND NGS
QUANTITATED

HIGH-QUALITY

MANUFACTURED

REFERENCE MATERIAL;

PROVIDES CONSISTENT

GROUND TRUTH

# GENES INCLUDED IN THE SERASEQ® COMPROMISED FFPE TUMOR DNA

AKT1	EGFR	MYC	CD74-ROS1
ALK	ERBB2	NRAS	NCOA4-RET
BRAF	KIT	PIK3CA	
BRCA1	KRAS	TP53	
BRCA2	MET		•

#### FEATURES AND BENEFITS

- 34 highly multiplexed variants across 17 genes, covering 18 SNVs, 10 INDELs, 3 CNVs, and 3 SVs, in FFPE format
- · Evaluate performance across the entire workflow, including pre-analytic extraction steps
- Mutation targets assessed with dPCR and NGS
- · Well-characterized GM24385 human genomic DNA as background 'wild-type' material
- Manufactured within cGMP compliant and ISO 13485 certified facilities

#### ABOUT SERACARE

TRUSTED SUPPLIER
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TESTING INDUSTRY
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MATERIALS, AND

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REAGENTS

INNOVATIVE TOOLS
AND TECHNOLOGIES
TO PROVIDE
ASSURANCE IN
DIAGNOSTIC ASSAY
PERFORMANCE AND
TEST RESULTS

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#### **GENE VARIANTS**

#	Gene	COSMIC ID	AA change	AA Mutation	Variant Type	
1	AKT1	COSM33765	p.E17K	c.49G>A	SNV	
2	ALK	COSM144250	p.G1202R	c.3604G>A		
3	ALK	COSM28055	p.F1175L	c.3522C>A		
4	BRAF	COSM476	p.V600E	c.1799T>A		
5	EGFR	COSM6240	p.T790M	c.2369C>T		
6	EGFR	COSM6224	p.L858R	c.2573T>G		
7	EGFR	COSM6493937	p.C797S	c.2389T>A		
8	KIT	COSM1314	p.D816V	c.2447A>T		
9	KRAS	COSM521	p.G12D	c.35G>A		
10	KRAS	COSM516	p.G12C	c.34G>T		
11	KRAS	COSM554	p.Q61H	c.183A>C		
12	NRAS	COSM584	p.Q61R	c.182A>G		
13	NRAS	COSM580	p.Q61K	c.181C>A		
14	PIK3CA	COSM775	p.H1047R	c.3140A>G		
15	PIK3CA	COSM765	p.E545D	c.1635G>T		
16	TP53	COSM10648	p.R175H	c.524G>A		
17	TP53	COSM10660	p.R273H	c.818G>A		
18	TP53	COSM10662	p.R248Q	c.743G>A		
19	BRAF	COSM473	p.V600K	c.1798_1799delins AA		
20	BRCA1	COSM1383519	p.K654fs*47	c.1961del		
21	BRCA2	COSM1738242	p.R2645fs*3	c.7934del		
22	EGFR	COSM6223	p.E746_A750 del ELREA	c.2235_2249del	Del	
23	EGFR	COSM12370	p.L747_P753>S	c.2240_2257del	Dei	
24	EGFR	COSM6256	p.S752_I759 del SPANKEI	c.2254_2277del		
25	TP53	COSM6530	p.C242fs*5	c.723delC		
26	TP53	COSM18610	p.S90fs*33	c.263delC		
27	EGFR	COSM12378	p.D770_N771insG	c.2310_2311insGG T	Ins	
28	ERBB2	COSM20959	p.Y772_A775dup	c.2313_2324dup		
29	ERBB2	N/A	Amplification	N/A	CNV	
30	MET	N/A	Amplification	N/A		
31	MYC	N/A	Amplification	N/A		
32	CD74-ROS1	N/A	translocation	N/A		
33	NCOA4-RET	RET N/A Gene Fusion		N/A	SV	
34	EML4-ALK	N/A	translocation	N/A		

#### ORDERING INFORMATION

Product	Format	Material No	Conc.	Volume	Total Mass
Seraseq Compromised FFPE Tumor DNA RM	Extraction Required - FFPE	0710-1492	1 FFPE curl/vial	10 μm	> 100 ng*

<sup>\*</sup>QIAamp FFPE Tissue DNA Kit.

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