Seraseq® ctDNA Complete Mutation Mix and Reference Material (AF5%, AF2.5%, AF1%, AF0.5%, AF0.1%, WT)

For Research Use Only. Not for use in diagnostic procedures.

These products contain fragmented DNA from GM24385 cells and plasmids of spiked in variants in 0.1x TE buffer or synthetic plasma.

This file lists the genomic coordinates for the spike in variants included in the material numbers 0710-0528~0710-0533, 0710-0669~0710-0674.

Gene	Nucleotide Change	Protein Change	Transcript	GRCh37 Location	GRCh38 Location	COSMIC ID	Type of Nucleotide Alteration
AKT1	c.49G>A	p.E17K	NM_001382430.1	14:105246551	14:104780214	COSM33765	SNV
ALK	c.3522C>A	p.F1174L	NM_004304.5	2:29443695	2:29220829	COSM28055	SNV
ALK	c.3604G>A	p.G1202R	NM_004304.5	2:29443613	2:29220747	COSM144250	SNV
BRAF	c.1799T>A	p.V600E	NM_004333.6	7:140453136	7:140753336	COSM476	SNV
BRCA1	c.1961del	p.K654fs	NM_007294.4	17:41245587	17:43093570	COSM219054	Deletion
BRCA2	c.7934del	p.R2645fs	NM_000059.4	13:32936788	13:32362651	COSM1738241	Deletion
EGFR	c.2235_2249del	p.E746_A750del	NM_005228.5	7:55242465_55242479	7:55174772_55174786	COSM6223	Deletion
EGFR	c.2240_2257del	p.L747_P753delinsS	NM_005228.5	7:55242470_55242487	7:55174777_55174794	COSM12370	Deletion
EGFR	c.2254_2277del	p.S752_I759del	NM_005228.5	7:55242484_55242507	7:55174791_55174814	COSM6256	Deletion
EGFR	c.2369C>T	p.T790M	NM_005228.5	7:55249071	7:55181378	COSM6240	SNV
EGFR	c.2573T>G	p.L858R	NM_005228.5	7:55259515	7:55191822	COSM6224	SNV
ERBB2	c.2313_2324dup	p.Y772_A775dup	NM_004448.4	17:37880984_37880995	17:39724731_39724742	COSM20959	Insertion
KIT	c.2447A>T	p.D816V	NM_000222.3	4:55599321	4:54733155	COSM1314	SNV
KRAS	c.183A>C	p.Q61H	NM_004985.5	12:25380275	12:25227341	COSM554	SNV
KRAS	c.34G>T	p.G12C	NM_004985.5	12:25398285	12:25245351	COSM516	SNV
KRAS	c.35G>A	p.G12D	NM_004985.5	12:25398284	12:25245350	COSM521	SNV
NRAS	c.182A>G	p.Q61R	NM_002524.5	1:115256529	1:114713908	COSM584	SNV
PIK3CA	c.3140A>G	p.H1047R	NM_006218.4	3:178952085	3:179234297	COSM775	SNV
PIK3CA	c.3204_3205insA	p.*1069Mext*3	NM_006218.4	3:178952149_178952150	3:179234361_179234362	NA	Insertion

Translocation	5' Transcript	5' Breakpoint GRCh37	5' Breakpoint GRCh38	3' Transcript	3' Breakpoint GRCh37	3' Breakpoint GRCh38
CD74::ROS1	NM_001025159.3	5:149784107	5:150404544	NM_001378902.1	6:117647238	6:117326075
EML4::ALK	NM_019063.5	2:42522716	2:42295576	NM_004304.5	2:29447256	2:29224390
NCOA4::RET	NM_001145263.2	10:51584251	10:46011571	NM_020975.6	10:43610593	10:43115146

CNV	Amplified Location GRCh37	Amplified Location GRCh38
ERBB2	17:37838724_37957722	17:39682471_39801469
MET (1)	7:116302716_116418397	7:116662662_116778343
MET (2)	7:116372111_116489445	7:116732057_116849391
MYC	8:128666784_128811899	8:127654539_127799653

NOTE: Genomic coordinates use the 1-based coordinate system.