

KRAS (G12S/+) Cell line Engineering Summary

Genotype	rs #	Cosmic ID	Position			
			Chromosome Number	Chromosome	Gene	Transcript
KRAS (G12S/+)	rs121913530	COSM517	12p12.1	g.25398285C>T (GRCh37) g.25245351C>T (GRCh38)	g.10570G>A	c.34G>A

Protein	Base change	Context	AA change
p.Gly12Ser	GGT ⇒ AGT	AGTTGGAGCT (G>A) GTGGCGTAGG	G [Gly] ⇒ S [Ser]

Reference sequence: Ensembl transcript KRAS-001 ENST00000311936

cagcagtctggctat ttagatagaacaacttgattttaagataaaagaactgtctatgtagcatttatgcatttt
tcttaagcgtc gatggaggagtttgtaaatgaagtacagttcattacgatac] [acgtctgcagtc aactggaa
tttcatgattgaat tttgtaaggat tttgaaataat tttcatataaagg tgagtttgattaaaagg tactg
gtggagtatttgat agtgattaaaccttatgtgtgacatgttctaata tagtcacattttcattat ttttattat
aagGCCTGCTGAAAATGACTGAAATAAACTTGTGGTAGTTGGAGCT (**G>A**) GTGGCGTAGGCAAGAGTGCCTT
GACGATACAGCTAATTCAGAATCATT TTTGTGGACGAATATGATCCAACAATAGAGgtaaatcttg ttttaatatg
catattactgg tgcaggaccattctttgatacagataaagg tttctctgaccattttcatgag tacttattacaa
gataattatgctgaaag ttaagttatctgaaatgtacctgggtttcaagttatatgtaaccattaatatgggaa
cttacttttctt

Lowercase blue sequence indicates intron

Uppercase PURPLE sequence indicates UTR

Uppercase BLACK sequence indicates exon coding sequence

]] indicates the site of engineering

(**G>A**) indicates the G12S mutation

Contact Horizon Diagnostics

Please note that primers designed upstream or across the engineering site will have a reduced efficiency and your assay may fail. Please contact us at technical@horizondx.com if you have any questions.

About Horizon Diagnostics

Horizon Diagnostics, a business unit of Horizon Discovery Group plc, is proud to support clinical laboratories with the provision of reference materials for research use; applications include the validation of equipment and consumables offline from patient testing. HDx™ Reference Standards are manufactured within a Quality Management System which complies with the requirements of ISO 9001:2008 and ISO 13485:2003.