

KRAS (G12V/+) Cell line Engineering Summary

Genotype	rs #	Cosmic ID	Position			
			Chromosome Number	Chromosome	Gene	Transcript
KRAS (G12V/+)	rs121913529	COSM520	12p12.1	g.25398284C>A (GRCh37) g.25245351C>A (GRCh38)	g.10571G>T	c.35G>T

Protein	Base change	Context	AA change
p.Gly12Val	GGT ⇒ GTT	GTTGGAGCTG (G>T) TGGCGTAGGC	G [Gly] ⇒ V [Val]

Reference sequence: Ensembl transcript KRAS-001 ENST00000311936

agaactgtctatgtagcatttatgcatttttcttaagcgtcgatggaggagtttgtaaataaggtacagttcatt
 acgatacacgtctgcagtcactggaattttcatgattgaattttgtaaggatatttgaaataattttcatata
 aaggtgagtttgattaaaaggtactggtggagtatttgatagtgtattaaccttatgtgtgacatgttctaata
 tagtcacattttcattatttttattataag**GCCTGCTGAAA**ATGACTGAATATAAACTTGTGGTAGTTGGAGCTG
(G>T) TGGCGTAGGCAAGAGTGCCTTGACGATACAGCTAATTCAGAATCATTTTGTGGACGAATATGATCCAA
 CAATAGAGgtaaactctgttttaatatgcatattactggtgcaggaccattctttgata] [cagataaagggtt
 ctctgaccattttcatgagtacttattacaagataattatgctgaaagtttaagttatctgaaatgtaccttgggt
 ttcaagttatatgtaaccattaatatgggaactttactttcct

Lowercase **blue** sequence indicates intron
 Uppercase **PURPLE** sequence indicates UTR
 Uppercase **BLACK** sequence indicates exon coding sequence
]] indicates the site of engineering
(G>T) indicates the G12V 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.

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