

KRAS (G12C/+) Cell line Engineering Summary

Genotype	rs #	Cosmic ID	Position			
			Chromosome Number	Chromosome	Gene	Transcript
KRAS (G12C/+)	rs121913530	COSM516	12p12.1	g.25398285C>A (GRCh37) g.25245351C>A (GRCh38)	g.10570G>T	c.34G>T

Protein	Base change	Context	AA change
p.Gly12Cys	GGT ⇒ TGT	AGTTGGAGCT (G>T) GTGGCGTAGG	G [Gly] ⇒ C [Cys]

Reference sequence: Ensembl transcript: KRAS-001 ENST00000311936

cagcagtcctggctat^{tt}tagatagaacaacttgatt^{ttta}agataaaaagaactgtctatgtagcatttatgcatt^{tt}tcttaagcgtcgatggaggag^{tttg}taaatgaagtacagttcattacgataca] [cgtctgcagtcactggaatttcatgattgaatt^{tttg}taaggtat^{tttg}aaataatt^{ttt}catataaaggtgag^{tttg}tattaaaggtactggtggagtat^{ttg}atagtgtattaac^{ctt}atgtgtgacatgt^{ttc}taatatagtcacatt^{ttt}cattat^{ttt}tattataagGCCTGCTGAAAATGACTGAATATAAACTTGTGGTAGTTGGAGCT (**G>T**) GTGGCGTAGGCAAGAGTGCCTTGACGATACAGCTAATTCAGAATCATT^{TTT}GTGGACGAATATGATCCAACAATAGAGgtaa^{atc}ttg^{ttt}taata^{tg}catattactgg^{tg}caggaccatt^ctttgatacagataaag^{gtt}tctctgaccatt^{ttt}catgag^{tact}tattacaagataattatgctgaaag^{tt}aag^{tt}tatctgaaatgtac^{ctt}ggg^{ttt}caag^{tt}tatatgtaaccattaat^{atg}gggaa^ctttact^{ttc}cttgggag^tatgtcaggg^tccatgatgt^tcact^ctctgtgcatt^{ttt}gattggaag^tgtatt^{tc}ag

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 G12C 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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