

## KRAS (G12R/+) Cell line Engineering Summary

Genotype	rs #	Cosmic ID	Position			
			Chromosome Number	Chromosome	Gene	Transcript
KRAS (G12R/+)	rs121913530	COSM518	12p12.1	g.25398285C>G (GRCh37) g.25245351C>G (GRCh38)	g.10570G>C	c.34G>C

  

Protein	Base change	Context	AA change
p.Gly12Arg	GGT ⇒ CGT	AGTTGGAGCT ( <b>G&gt;C</b> ) GTGGCGTAGG	G [Gly] ⇒ R [Arg]

Reference sequence: Ensembl transcript KRAS-001 ENST00000311936

cagcagtctggctat<sup>tt</sup>tagatagaacaacttgatt<sup>ttta</sup>agataaaagaactgtctatgtagcatttatgcatt<sup>tt</sup>  
tcttaagcgtcgatggaggag<sup>ttt</sup>gtaaatgaagtacagttcattacgatac<sup>]</sup> [acgtctgcag<sup>t</sup>caactggaat<sup>tt</sup>  
t<sup>tt</sup>catgattgaat<sup>ttt</sup>gtaaggtat<sup>ttt</sup>gaaataat<sup>ttt</sup>catataaaggtgag<sup>ttt</sup>gtatt<sup>taa</sup>aggtactgg<sup>t</sup>  
tggagtat<sup>tt</sup>gatagtgtattaac<sup>tt</sup>atgtgtgacatgtt<sup>c</sup>taatatagtcacatt<sup>tt</sup>cattat<sup>ttt</sup>tattata<sup>a</sup>  
agGCCTGCTGAAAATGACTGAATATAAACTTGTGGTAGTTGGAGCT (**G>C**) GTGGCGTAGGCAAGAGTGCCT  
TGACGATACAGCTAATTCAGAAATCATTTTGTGGACGAAATATGATCCAACAATAGAGg<sup>t</sup>aaatc<sup>tt</sup>gt<sup>tt</sup>ta<sup>at</sup>a<sup>t</sup>  
gcatattactggtgcaggaccatt<sup>c</sup>tttgatacagataaaggt<sup>tt</sup>ctctgaccatt<sup>tt</sup>catgagtacttattaca<sup>a</sup>  
agataattatgctgaaag<sup>t</sup>taag<sup>t</sup>tatctgaaatgtac<sup>ct</sup>tg<sup>gg</sup>ttcaag<sup>t</sup>tata<sup>t</sup>gtaaccattaat<sup>at</sup>ggga<sup>a</sup>  
act<sup>tt</sup>act<sup>tt</sup>c<sup>t</sup>

Lowercase **blue** sequence indicates intron  
Uppercase **PURPLE** sequence indicates UTR  
Uppercase **BLACK** sequence indicates exon coding sequence  
**]]** indicates the site of engineering  
**(G>C)** indicates the G12R 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](mailto:technical@horizondx.com) if you have any questions.

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