

## KRAS (G12A/+) Cell line Engineering Summary

Genotype	rs #	Cosmic ID	Position		
			Chromosome	Gene	Transcript
KRAS (G12A/+)	rs121913529	COSM522	g.25398284C>G (GRCh37) g.25245350C>G (GRCh38)	g.10571G>C	c.35G>C

  

Protein	Base change	Context	AA change
p.Gly12Ala	GGT ⇒ GCT	GTTGGAGCTG ( <b>G&gt;C</b> ) TGGCGTAGGC	G [Gly] ⇒ A [Ala]

Reference sequence: Ensembl transcript: KRAS-001 ENST00000311936

agaactgtctatgtagcatttatgcatttttcttaagcgtcgatggaggagtttgtaaataaggtacagttcatt  
 acgatac ] [acgtctgcagtcactggaattttcatgattgaattttgtaaggatatttgaaataattttcat  
 ataaaggtgagtttgattaaaaggtactggtggagtattgatagtgtattaacctatgtgtgacatgttcta  
 atatagtcacattttcattatttttattataag**GCCTGCTGAAA**ATGACTGAATATAAACTTGTGGTAGTTGGAG  
 CTG (**G>C**) TGGCGTAGGCAAGAGTGCCTTGACGATACAGCTAATTCAGAATCATTTTGTGGACGAATATGATC  
 CAACAATAGAGgtaaactctgttttaatatgcatattactggtgcaggaccattctttgatacagataaagggtt  
 ctctgaccattttcatgagtacttattacaagataattatgctgaaagttaagttatctgaaatgtaccttgggt  
 ttcaagttatatgtaaccattaatatgggaactttactttcct

Lowercase **blue** sequence indicates intron  
 Uppercase **PURPLE** sequence indicates UTR region  
 Uppercase **BLACK** sequence indicates exon coding sequence  
 ] [ indicates the site of engineering  
 (**G>C**) indicates the G12A 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.

### 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.