



List of Mutations Detectable with the UltraSEEK™ Colon Panel

GENE	NCBI Ref Seq	HGVS Nomenclature		COSMIC ID
		CDS Mutation	AA Mutation	
BRAF	NM_004333	c.1406G>A	p.G469E	461
		c.1406G>C	p.G469A	460
		c.1781A>G	p.D594G	467
		c.1781A>T	p.D594V	466
		c.1799T>A	p.V600E	476
EGFR	NM_005228	c.1351C>A/c.1351C>G	p.R451S	N/A
		c.1351C>T	p.R451C	N/A
		c.1391C>T	p.S464L	N/A
		c.1393G>A/C	p.G465R	N/A
		c.1394G>A	p.G465E	N/A
		c.1400A>C	p.K467T	N/A
		c.1473A>G	p.L491M	N/A
		c.1474A>C	p.S492R	236671
		c.1476C>A/G	p.S492R	236670
KRAS	NM_004985	c.176_178delCAG	p.A59del	1667040
		c.175G>A	p.A59T	546
		c.175G>C	p.A59P	N/A
		c.175G>T	p.A59S	1235389
		c.176C>A	p.A59E	547
		c.176C>G	p.A59G	28518
		c.181C>A	p.Q61K	549
		c.180_181TC>AA	p.Q61K	87298
		c.181C>G	p.Q61E	550
		c.182A>C	p.Q61P	551
		c.182A>G	p.Q61R	552

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GENE	NCBI Ref Seq	HGVS Nomenclature		COSMIC ID
		CDS Mutation	AA Mutation	
KRAS	NM_004985	c.182A>T	p.Q61L	553
		c.183A>C	p.Q61H	554
		c.183A>T	p.Q61H	555
		c.34_35GG>CT	p.G12L	514
		c.34_35GG>TA	p.G12Y	25081
		c.34_35GG>TT	p.G12F	512
		c.34_36GGT>TGG	p.G12W	36281
		c.349A>G	p.K117E	N/A
		c.34G>A	p.G12S	517
		c.34G>C	p.G12R	518
		c.34_36GGT>AGA	p.G12R	249888
		c.34G>T	p.G12C	516
		c.35_36insAGCTGG	p.G12_G13insAG	1562186
		c.350A>C	p.K117T	N/A
		c.350A>G	p.K117R	4696722
		c.351A>T	p.K117N	28519
		c.351A>C	p.K117N	19940
		c.35_36GT>AG	p.G12E	30566
		c.35G>A	p.G12D	521
		c.35_36GT>AC	p.G12D	14209
		c.35G>C	p.G12A	522
		c.35_36GT>CA	p.G12A	5413585
		c.35G>T	p.G12V	520
		c.35_36GT>TC	p.G12V	515
		c.37_38GG>TT	p.G13F	1685355
		c.37G>A	p.G13S	528
c.37G>C	p.G13R	529		

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GENE	NCBI Ref Seq	HGVS Nomenclature		COSMIC ID
		CDS Mutation	AA Mutation	
KRAS	NM_004985	c.37_39GGC>CGT	p.G13R	526
		c.37G>T	p.G13C	527
		c.38G>A	p.G13D	532
		c.38G>C	p.G13A	533
		c.38G>T	p.G13V	534
		c.38_39GC>TT	p.G13V	12721
		c.436G>A	p.A146T	19404
		c.436G>C	p.A146P	19905
		c.437C>G	p.A146G	N/A
		c.437C>T	p.A146V	19900
NRAS	NM_002524	c.175G>A	p.A59T	578
		c.176C>G	p.A59G	5878737
		c.181C>A	p.Q61K	580
		c.181_183CAA>AAG	p.Q61K	53223
		c.181C>G	p.Q61E	581
		c.182A>C	p.Q61P	582
		c.182A>G	p.Q61R	584
		c.182_183AA>GG	p.Q61R	33693
		c.182A>T	p.Q61L	583
		c.182_183AA>TG	p.Q61L	30646
		c.183A>C	p.Q61H	586
		c.183A>T	p.Q61H	585
		c.34_35GG>AA	p.G12N	12723
		c.34_35GG>CC	p.G12P	559
		c.34_35GG>TA	p.G12Y	560
		c.349A>G	p.K117E	N/A
		c.34G>A	p.G12S	563



GENE	NCBI Ref Seq	HGVS Nomenclature		COSMIC ID
		CDS Mutation	AA Mutation	
<i>NRAS</i>	NM_002524	c.34G>C	p.G12R	561
		c.34G>T	p.G12C	562
		c.350A>C	p.K117T	N/A
		c.350A>G	p.K117R	N/A
		c.351G>C	p.K117N	N/A
		c.351G>T	p.K117N	N/A
		c.35G>A	p.G12D	564
		c.35G>C	p.G12A	565
		c.35G>T	p.G12V	566
		c.37_38GG>AA	p.G13N	24668
		c.37_38GG>TA	p.G13Y	568
		c.37G>A	p.G13S	571
		c.37G>C	p.G13R	569
		c.37G>T	p.G13C	570
		c.38G>A	p.G13D	573
		c.38G>C	p.G13A	575
		c.38G>T	p.G13V	574
		c.38_39GT>TC	p.G13V	572
		c.436G>A	p.A146T	27174
		c.436G>C	p.A146P	4172577
c.436G>T	p.A146S	N/A		
c.437C>G	p.A146G	N/A		
c.437C>T	p.A146V	4170228		
<i>PIK3CA</i>	NM_006218	c.1624G>A	p.E542K	760
		c.1633G>A	p.E545K	763
		c.3140A>G	p.H1047R	775
		c.3140A>T	p.H1047L	776