Variant List – OncoFOCUS v3 Panel

Gene	Nucleotide Change	Amino Acid Change	COSMIC ID
BRAF	c.1405_1406GG>TC	p.G469S	458
	c.1405G>A	p.G469R	457
	c.1405_1407GGA>AGC	p.G469S	1113
	c.1405_1407GGA>AGT	p.G469S	27912
	c.1405G>C	p.G469R	455
	c.1406G>A	p.G469E	461
	c.1406G>C	p.G469A	460
	c.1406G>T	p.G469V	459
	c.1781A>G	p.D594G	467
	c.1781A>T	p.D594V	466
	c.1789_1790CT>TC	p.L597S	1126
	c.1789C>G	p.L597V	470
	c.1790T>A	p.L597Q	1125
	c.1790T>G	p.L597R	471
	c.1798G>T	p.V600L	33808
	c.1798G>A	p.V600M	1130
	c.1798_1799GT>AA	p.V600K	473
	c.1798_1799GT>AG	p.V600R	474
	c.1798G>C	p.V600L	219798
	c.1799_1800TG>AA	p.V600E	475
	c.1799_1800TG>AT	p.V600D	477
	c.1799T>A	p.V600E	476
	c.1799T>G	p.V600G	6137
	c.1801_1803delAAA	p.K601del	30594
	c.1801A>G	p.K601E	478
	c.1801A>C	p.K601Q	NA
	c.1803A>C/T	p.K601N	1132/6265
	c.1803A>G	p.K601K	28507
EGFR	c.1793G>T	p.G598V	21690
	c.2155G>T	p.G719C	6253
	c.2156G>A	p.G719D	18425
	c.2156G>C	p.G719A	6239
	c.2233_2247del15	p.K745_E749delKELRE	26038
	c.2234_2236delAGG/2232_2233ins(18) AAAATTCCCGTCGCTATC	p.E746del/I744_K745insKIPVAI	NA
	c.2235_2246del(12)GGAATTAAGAGA	p.E746_E749del	NA

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Gene	Nucleotide Change	Amino Acid Change	COSMIC ID
EGFR	c.2235_2246del12/c.2235_2248>AATTC/c.2235_2249del15/c.2235_2251>AATTC/c.2235_2251>AG/c.2235_2252>AAT/c.2235_2252del18/c.2235_2255>AAT	p.E746_E749delELRE/p.E746_A750>IP/p.E746_A750delELREA/p.E746_T751>IP/p.E746_T751>A/p.E746_T751>I/p.E746_T751delELREAT/p.E746_S752>I	28517/13550/6223/13552/13549/13551/24869/12385
	c.2235_2248>AATTC	p.E746_A750>IP	13550
	c.2235_2248>AATTC/c.2236_2248>AGAC/c.2236_2248>CAAC/c.2238_2248>GC/c.2239_2248TTAAGAGAAG>C	p.E746_A750>IP/p.E746_A750>RP/p.E746_A750>QP/p.L747_A750>P/p.L747_A750>P	13550/12413/13557/12422/12382
	c.2235_2249del15	p.E746_A750delELREA	6223
	c.2235_2251>AATTC	p.E746_T751>IP	13552
	c.2235_2251>AG	p.E746_T751>A	13549
	c.2235_2252>AAT	p.E746_T751>I	13551
	c.2235_2252del18	p.E746_T751delELREAT	24869
	c.2235_2255>AAT	p.E746_S752>I	12385
	c.2236_2248>CAAC	p.E746_A750>QP	13557
	c.2236_2250del15	p.E746_A750delELREA	6225
	c.2236_2251>T	p.E746_T751>S	26513
	c.2236_2252>AT	p.E746_T751>I	26680
	c.2236_2253>ATTCCT	p.E746_T751>IP	51526
	c.2236_2253>CAA	p.E746_T751>Q	22999
	c.2236_2253>CTA	p.E746_T751>L	133187
	c.2236_2253del18	p.E746_T751delELREAT	12728
	c.2236_2255>AT	p.E746_S752>I	133188
	c.2236_2256>ATC	p.E746_S752>I	133190
	c.2236_2256del21	p.E746_S752delELREATS	133189
	c.2236_2257>CTCT	p.E746_P753>LS	13200
	c.2236_2257>CTCT/c.2237_2257>TCT/c.2239_2257>T/c.2240_2257del18/c.2257C>T	p.E746_P753>LS/p.E746_P753>VS/p.L747_P753>S/p.L747_P753>S/p.P753S	13200/18427/133197/12370/6268
	c.2236_2259>ATCTCG	p.E746_P753>IS	NA
	c.2236G>A/c.2236_2248>AGAC/c.2236_2250del15/c.2236_2252>AT/c.2236_2253>ATTCCT/c.2236_2255>AT/c.2236_2256>ATC/c.2236_2259>ATCTCG	p.E746K/p.E746_A750>RP/p.E746_A750delELREA/p.E746_T751>I/p.E746_T751>IP/p.E746_S752>I/p.E746_S752>I/p.E746_P753>IS	13184/12413/6225/26680/51526/133188/133190/133191

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Gene	Nucleotide Change	Amino Acid Change	COSMIC ID
EGFR	c.2237_2238AA>TT/c.2237_2250>TCCCT/c.2237_2251>TGG/c.2237_2251>TTC/c.2237_2252>T/c.2237_2253>TA/c.2237_2253>TC/c.2237_2253>TTCCT/c.2237_2253>TTGCT/c.2237_2255>T/c.2237_2256>TC/c.2237_2256>TG/c.2237_2256>TT/c.2237_2257>TCT/c.2237_2258>TTCA	p.E746V/p.E746_A750>VP/p.E746_T751>VA/p.E746_T751>VP/p.E746_T751>V/p.E746_T751>V/p.E746_T751>V/p.E746_T751>VP/p.E746_T751>VA/p.E746_S752>V/p.E746_S752>V/p.E746_S752>V/p.E746_S752>V/p.E746_P753>VS/p.E746_P753>VQ	51497/28623/53205/18421/12386/133192/133193/52935/12416/12384/18426/674057/133194/18427/51524
	c.2237_2250>TCCCT	p.E746_A750>VP	28623
	c.2237_2251>TGG	p.E746_T751>VA	53205
	c.2237_2251>TTC	p.E746_T751>VP	18421
	c.2237_2251del15	p.E746_T751>A	12678
	c.2237_2252>T	p.E746_T751>V	12386
	c.2237_2253>TC	p.E746_T751>V	133193
	c.2237_2253>TTCCT/c.2237_2253>TTGCT	p.E746_T751>VP/p.E746_T751>VA	52935/12416
	c.2237_2254del18	p.E746_S752>A	12367
	c.2237_2255>T	p.E746_S752>V	12384
	c.2237_2256>TC	p.E746_S752>V	18426
	c.2237_2256>TT/c.2238_2255>GCAACA/c.2238_2255del18/c.2255C>A	p.E746_S752>V/p.L747_S752>QH/p.E746_S752>D/p.S752Y	133194/12421/6220/13186
	c.2237_2257>TCT	p.E746_P753>VS	18427
	c.2237_2258>TTCA	p.E746_P753>VQ	51524
	c.2238_2248>GC	p.L747_A750>P	12422
	c.2238_2248>TC	p.E746_A750>DP	NA
	c.2238_2251>GC	p.L747_T751>P	22944
	c.2238_2252>GCA	p.L747_T751>Q	12419
	c.2238_2255>GCAACA	p.L747_S752>QH	12421
	c.2238_2255del18	p.E746_S752>D	6220
	c.2238_2256>GCAA	p.L747_S752>Q	26441
	c.2239_2240TT>CC/c.2239_2248TTAAGAGAAG>C/c.2239_2250>CCA/c.2239_2251>C/c.2239_2252>CA/c.2239_2253>CAA/c.2239_2253>CCAACG/c.2239_2256>CAA/c.2239_2256>CAACAT/c.2239_2256del18/c.2239_2258>CA	p.L747P/p.L747_A750>P/p.L747_A750>P/p.L747_T751>P/p.L747_T751>Q/p.L747_T751>Q/p.L747_T751>PT/p.L747_S752>Q/p.L747_S752>QH/p.L747_S752delLREATS/p.L747_P753>Q	24267/12382/133195/12383/12420/51527/1235296/12403/133196/6255/12387
	c.2239_2247del(9)TTAAGAGAA	p.L747_E749del	NA
	c.2239_2247delTTAAGAGAA/c.2239_2253>GCT/c.2239_2262del24/c.2239_2264>GCCAA	p.L747_E749delLRE/p.L747_T751>A/p.L747_K754delLREATSPK/p.L747_A755>AN	6218/23572/24970/85891
	c.2239_2248TTAAGAGAAG>C	p.L747_A750>P	12382
	c.2239_2251>C	p.L747_T751>P	12383

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Gene	Nucleotide Change	Amino Acid Change	COSMIC ID
EGFR	c.2239_2252>CA	p.L747_T751>Q	12420
	c.2239_2253>GCT	p.L747_T751>A	23572
	c.2239_2255>CAACA	p.L747_S752>QH	NA
	c.2239_2256>CAA/c.2239_2256del18	p.L747_S752>Q/p.L747_S752delLREATS	12403/6255
	c.2239_2258>CA	p.L747_P753>Q	12387
	c.2240_2251del12	p.L747_T751>S	6210
	c.2240_2254del15/c.2239_2253del15	p.L747_T751delLREAT/p.L747_T751delLREAT	12369/6254
	c.2240_2257del18	p.L747_P753>S	12370
	c.2240T>C/c.2240_2251del12/c.2240_2254del15/c.2240_2257del18/c.2240_2261>CGAC	p.L747S/p.L747_T751>S/p.L747_T751delLREAT/p.L747_P753>S/p.L747_K754>ST	26704/6210/12369/12370/20883
	c.2248G>C	p.A750P	6219
	c.2251_2277>TCC	p.T751_I759>S	133200
	c.2251_2277>TCT/c.2252_2277>AT/c.2257_2277del21	p.T751_I759>S/p.T751_I759>N/p.P753_I759delPKANKEI	22945/24270/24269
	c.2252_2275>G/c.2252_2277>GAGAAGCG	p.T751fs*4/p.T751_I759>REA	12410/22956
	c.2252_2276>A	p.T751_I759>N	96856
	c.2252_2276>A/c.2276T>A	p.T751_I759>N/p.I759N	96856/23633
	c.2252_2277>AT	p.T751_I759>N	24270
	c.2252_2277>GAGAAGCG	p.T751_I759>REA	22956
	c.2252C>T	p.T751I	13185
	c.2252C>T/c.2252_2275del24	p.T751I/p.T751_E758delTSPKANKE	13185/133207
	c.2253_2276del24	p.S752_I759delSPKANKEI	13556
	c.2254_2277del24	p.S752_I759delSPKANKEI	6256
	c.2254T>C	p.S752P	29274
	c.2257_2277del21	p.P753_I759del	NA
	c.2258C>A	p.P753Q	NA
	c.2281G>A/c.2281G>T	p.D761N/p.D761Y	13188/21984
	c.2298_2299insGCCATA	p.M766_A767insAI	NA
	c.2302_2303insCGCTGGCCA/c.2303G>C	p.A767_S768insTLA/p.S768T	12425/291998
	c.2303G>A	p.S768N	12989
	c.2303G>T/c.2303_2305GCG>TCT	p.S768I/p.S768_V769>IL	6241/85750
	c.2307_2308insTGCGTG	p.V769_D770insCV	12379
	c.2308_2309insCCAGCGTGG/c.2309_2312ACAA>CTGGTGG	p.V769_D770insASV/p.D770_N771>AGG	12426/12737
	c.2308_2309insGCAGCGTGG/c.2308_2309insGGGTCGTGG/c.2308_2309insGTT	p.V769_D770insGSV/p.V769_D770insGVV/p.D770>GY	18429/18430/12427
	c.2308_2315GACAACCC>CCAGCGTGGATAACCG	p.D770_P772>ASVDNR	NA

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Gene	Nucleotide Change	Amino Acid Change	COSMIC ID
EGFR	c.2308G>A	p.D770N	14068
	c.2309_2310ins(14)atggccagcgtgga	p.D770fs*61(3' Detetion Only)	24436
	c.2309_2310AC>CCAGCGTGGAT	p.V769_D770insASV	NA
	c.2309_2312ACAA>CTGGTGG	p.D770_N771>AGG	12737
	c.2310_2311insGCACCGTGG	p.D770_N771insAPW	20886
	c.2310_2311insGCACCGTGG/c.2310_2311insGGC/ c.2310_2311insGGGGAC/c.2310_2311insGGGTTA/ c.2310_2311insGGGTTT/c.2310_2311insGGT/ c.2311A>GGTT/c.2311_2312AA>GGGTT	p.D770_N771insAPW/p.D770_ N771insG/p.D770_N771insGD/p. D770_N771insGL/p.D770_ N771insGF/p.D770_N771insG/p. N771>GY/p.N771>GF	20886/13004/85 795/48921/6551 55/12378/53189/ 18431
	c.2310_2311insGGGTTA	p.D770_N771insGL	48921
	c.2310_2311insGGT	p.D770_N771insG	12378
	c.2311_2312AA>GGGTT	p.N771>GF	18431
	c.2311_2312ins(12)tggccaccccca	p.D770_ N771insMATP(5'DetetionOnly)	NA
	c.2311_2312insACCGGC/c.2311_2312insCAC/ c.2311_2312insGTC	p.N771_P772insRH/p. N771>TH/p.N771>SH	166390/22946/ 24434
	c.2311_2312insCAC	p.N771>TH	22946
	c.2311_2312insGCGTGGACA/c.2311_2312insGTC	p.D770_N771insSVD/p.N771>SH	13428/24434
	c.2311_2312insGTC	p.N771>SH	24434
	c.2311A>GGTT	p.N771>GY	53189
	c.2312_2315ACCC>GCGTGGACAACCG	p.N771_P772>SVDNR	NA
	c.2313_2314insAAC	p.N771_P772insN(3' Detetion Only)	20887
	c.2315_2316insGGT	p.P772_H773insV(3' Detetion Only)	255205
	c.2315_2316insCCACGT/c.2319_2320insCAC	p.V774_C775insHV/p.H773_ V774insH	404810/12377
	c.2316_2317insCACGTG	p.V774_C775insHV	133201
	c.2317_2317C>AACCCCT	p.H773>NPY(3'DetetionOnly)	NA
	c.2319_2320ins(9)aacccccac	p.H773_V774insNPH	NA
	c.2319_2320insAACCCCCAC/c.2320G>A	p.H773_V774insNPH/p.V774M	12381/13006
	c.2319_2320insCAC	p.H773_V774insH	NA
	c.2319_2320insCAC/c.2319_2320insCAG/ c.2319_2320insCCCCAC	p.H773_V774insH/p.H773_ V774insQ/p.H773_V774insPH	12377/131552/ 12380
	c.2319_2320insCCCCAC	p.H773_V774insPH	NA
	c.2320G>T	p.V774L	25090
	c.2321_2322insCCACGT	p.V774_C775insHV	NA
	c.2326C>T	p.R776C	6226
	c.2327G>A	p.R776H	22940
	c.2369C>T	p.T790M	6240
	c.2560A>G	p.T854A	28537

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Gene	Nucleotide Change	Amino Acid Change	COSMIC ID
EGFR	c.2572C>A/c.2572_2573CT>AA/c.2572_2573CT>AG	p.L858M/p.L858K/p.L858R	12366/24268/13553
	c.2573T>G/c.2573_2574TG>GA/c.2573_2574TG>GT	p.L858R/p.L858R/p.L858R	6224/133630/12429
	c.2582T>A/c.2582T>G	p.L861Q/p.L861R	6213/12374
	c.323G>A	p.R108K	21683
	c.787A>C	p.T263P	21684
	c.866C>T/c.866C>A	p.A289V/p.A289D	21687/21685
KIT	c.1669T>C	p.W557R	1219
	c.1669T>G	p.W557G	1221
	c.1676T>A	p.V559D	1252
	c.1676T>C	p.V559A	1255
	c.1676T>G	p.V559G	1253
	c.1727T>C	p.L576P	1290
	c.1924A>C	p.K642Q	96871
	c.1924A>G	p.K642E	1304
	c.2446G>C	p.D816H	1311
	c.2446G>T	p.D816Y	1310
KRAS	c.175G>A	p.A59T	546
	c.176C>A	p.A59E	547
	c.176C>G	p.A59G	28518
	c.181C>A	p.Q61K	580
	c.181C>G	p.Q61E	550
	c.182A>C	p.Q61P	582
	c.182A>G	p.Q61R	584
	c.182A>T	p.Q61L	583
	c.183A>C	p.Q61H	554
	c.183A>T	p.Q61H	585
	c.34_35GG>AA	p.G12N	12723
	c.34_35GG>AT	p.G12I	34144
	c.34_35GG>CT	p.G12L	514
	c.34_35GG>TA	p.G12Y	25081
	c.34_35GG>TT	p.G12F	512
	c.34_36GGT>TGC	p.G12C	513
	c.34_36GGT>TGG	p.G12W	36281
	c.34-35GG>AC	p.G12T	NA
	c.34-35GG>CC	p.G12P	NA
	c.34-36GGT>AGA	p.G12R	NA
	c.349A>G	p.K117E	1360831

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Gene	Nucleotide Change	Amino Acid Change	COSMIC ID
KRAS	c.34G>A	p.G12S	517
	c.34G>C	p.G12R	518
	c.34G>T	p.G12C	516
	c.35_36GT>AA/c.36T>A	p.G12E/p.G12G	519/524
	c.35_36GT>AC/c.35_36GT>TC/c.36T>C	p.G12D/p.G12V/p.G12G	14209/515/523
	c.35_36GT>AG/c.36T>G/c.36_37insGCG/c.39_40insGGC	p.G12E/p.G12G/p.G12_G13insA/p.G13_V14insG	144577/1159170/303833/219781
	c.350A>G	p.K117R	4696722
	c.351A>C/351A>T	p.K117N/K117N	19940/28519
	c.35G>A	p.G12D	521
	c.35G>C	p.G12A	522
	c.35G>T	p.G12V	520
	c.36_37TG>AT/c.37G>T	p.G13C/p.G13C	87281/527
	c.37_38GG>AA/c.38G>A	p.G13N/p.G13D	24668/532
	c.37_38GG>AT/c.38G>T	p.G13I/p.G13V	525/574
	c.37G>A	p.G13S	528
	c.37G>C	p.G13R	569
	c.38G>C	p.G13A	533
	c.436G>C/c.436G>A	p.A146P/p.A146T	19905/19404
	c.437C>T/437C>G	p.A146V/A146G	19900/
NRAS	c.175G>A	p.A59T	578
	c.180_181AC>TA/c.181C>A	p.Q61K/p.Q61K	12730/580
	c.181_183CAA>AAG/c.183A>G	p.Q61K/p.Q61Q	53223/587
	c.181C>G	p.Q61E	581
	c.182_183AA>GG	p.Q61R	33693
	c.182_183AA>TG	p.Q61L	30646
	c.182A>C	p.Q61P	582
	c.182A>G	p.Q61R	584
	c.182A>T	p.Q61L	583
	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.349A>G	p.K117E	NA
	c.34G>T/c.34-35GG>TA	p.G12C/Y	562/560
	c.35G>A/c.35_36GT>AG	G12D/G12E	564/144577
	c.350A>G	p.K117R	NA
	c.351G>T/C	p.K117N	NA
	c.35G>C	p.G12A	565

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Gene	Nucleotide Change	Amino Acid Change	COSMIC ID
NRAS	c.35G>T	p.G12V	566
	c.37_38GG>AA	p.G13N	24668
	c.37_38GG>TA	p.G13Y	568
	c.37G>C	p.G13R	569
	c.38G>A	p.G13D	573
	c.38G>C	p.G13A	575
	c.38G>T/c.38_39GT>TC	p.G13V/p.G13V	574/572
	c.436G>A	p.A146T	27174
	c.436G>C	p.A146P	NA
	c.436G>T	p.A146S	NA

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