List of Mutations Detectable with the UltraSEEK™ Lung Panel

GENE	NCBI Ref Seq	HGVS Nomenclature		
		CDS Mutation	AA Mutation	COSMIC ID
BRAF	NM_004333	c.1406G>C	p.G469A	460
		c.1406G>T	p.G469V	459
		c.1781A>G	p.D594G	467
		c.1799T>A	p.V600E	476
EGFR	NM_005228	c.2125G>A	p.E709K	12988
		c.2126A>C	p.E709A	13427
		c.2126A>G	p.E709G	13009
		c.2126A>T	p.E709V	12371
		c.2155G>T	p.G719C	6253
		c.2155G>A	p.G719S	6252
		c.2156G>C	p.G719A	6239
		c.2233_2247del(15)AAGGAATTAAGAGAA	p.K745_E749del	26038
		c.2235_2249del(15)GGAATTAAGAGAAGC	p.E746_A750del	6223
		c.2235_2248>AATTC	p.E746_A750>IP	13550
		c.2235_2251>AATTC	p.E746_T751>IP	13552
		c.2236_2250del(15)GAATTAAGAGAAGCA	p.E746_A750del	6225
		c.2236_2253del(18)GAATTAAGAGAAGCAACA	p.E746_T751del	12728
		c.2237_2251del(15)AATTAAGAGAAGCAA	p.E746_T751>A	12678
		c.2237_2254del(18)AATTAAGAGAAGCAACAT	p.E746_S752>A	12367
		c.2237_2252>T	p.E746_T751>V	12386
		c.2237_2253>TTGCT	p.E746_T751>VA	12416
		c.2237_2253>TTCCT	p.E746_T751>VP	52935
		c.2237_2257>TCT	p.E746_P753>VS	18427
		c.2237_2255>T	p.E746_S752>V	12384
		c.2238_2255del(18)ATTAAGAGAAGCAACATC	p.E746_S752>D	6220

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GENE	NCBI Ref Seq	HGVS Nomenclature		
		CDS Mutation	AA Mutation	COSMIC ID
EGFR	NM_005228	c.2238_2248>GC	p.L747_A750>P	12422
		c.2238_2252>GCA	p.L747_T751>Q	12419
		c.2239_2247del(9)TTAAGAGAA	p.L747_E749del	6218
		c.2239_2256del(18)TTAAGAGAAGCAACATCT	p.L747_S752del	6255
		c.2239_2256>CAA	p.L747_S752>Q	12403
		c.2239_2248TTAAGAGAAG>C	p.L747_A750>P	12382
		c.2239_2251TTAAGAGAAGCAA>C	p.L747_T751>P	12383
		c.2239_2258>CA	p.L747_P753>Q	12387
		c.2240_2251del(12)TAAGAGAAGCAA	p.L747_T751>S	6210
		c.2240_2254del(15)TAAGAGAAGCAACAT	p.L747_T751del	12369
		c.2240_2257del(18)TAAGAGAAGCAACATCTC	p.L747_P753>S	12370
		c.2303G>T	p.S768I	6241
		c.2307_2308ins(9)GCCAGCGTG	p.V769_D770insASV	12376
		c.2308_2309ins(9)CCAGCGTGG	p.V769_D770insASV	12426
		c.2309_2310AC>CCAGCGTGGAT	p.V769_D770insASV	13558
		c.2310_2311insGGT	p. D770-N771insG	12378
		c.2311_2312ins(9)GCGTGGACA	p.D770_N771insSVD	13428
		c.2319_2320ins(9)AACCCCCAC	p.H773_V774insNPH	12381
		c.2319_2320InsCAC	p. H773-V774insH	12377
		c.2369C>T	p.T790M	6240
		c.2389T>A	p.C797S	N/A
		c.2390G>C	p.C797S	5945664
		c.2573T>G	p.L858R	6224
		c.2582T>A	p.L861Q	6213
		c.2582T>G	p.L861R	12374

GENE	NCBI Ref Seq	HGVS Nomenclature		
		CDS Mutation	AA Mutation	COSMIC ID
ERBB2	NM_004448	c.2324_2325ins(12)ATACGTGATGGC	p.A775_G776insYVMA	20959
		c.2325_2326ins(12)TACGTGATGGCT	p.A775_G776insYVMA	12558
		c.2326_2327ins(3)TGT	p.G776>VC	12553
		c.2326_2327ins(3)TTT	p.G776>VC	12552
KRAS	NM_004985	c.34G>A	p.G12S	517
		c.34G>C	p.G12R	518
		c.34G>T	p.G12C	516
		c.35G>A	p.G12D	521
		c.35G>C	p.G12A	522
		c.35G>T	p.G12V	520
		c.37G>T	p.G13C	527
		c.38G>A	p.G13D	532
		c.183A>C	p.Q61H	554
		c.183A>T	p.Q61H	555
		c.181C>A	p.Q61K	549
		c.181C>G	p.Q61E	550
		c.182A>C	p.Q61P	551
		c.182A>G	p.Q61R	552
		c.182A>T	p.Q61L	553
PIK3CA	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