

Table S1 Information of 68 genes in targeted next generation sequencing (NGS) panel for lung cancer

Gene	Probe Coverage	NCBI number
<i>AKT1</i>	wholeExons	NM_001014432.1
<i>ALK</i>	wholeExons&selectedIntrons	NM_004304.4
<i>APC</i>	wholeExons	NM_000038.5
<i>AR</i>	wholeExons	NM_000044.3
<i>ARAF</i>	wholeExons	NM_001256196.1
<i>ATM</i>	wholeExons	NM_000051.3
<i>AXL</i>	wholeExons	NM_021913.4
<i>BCL2L11</i>	intronOnly	NM_001204107.1
<i>BRAF</i>	wholeExons	NM_004333.4
<i>BRCA1</i>	wholeExons	NM_007294.3
<i>BRCA2</i>	wholeExons	NM_000059.3
<i>CCND1</i>	wholeExons	NM_053056.2
<i>CD74</i>	intronOnly	NM_001025158.2
<i>CDK4</i>	wholeExons	NM_000075.3
<i>CDK6</i>	wholeExons	NM_001145306.1
<i>CDKN2A</i>	wholeExons	NM_000077.4
<i>CTNNB1</i>	wholeExons	NM_001904.3
<i>CYP2D6</i>	SNP	NM_001025161.2
<i>DDR2</i>	wholeExons	NM_001014796.1
<i>DPYD</i>	SNP	NM_000110.3
<i>EGFR</i>	wholeExons	NM_005228.3
<i>ERBB2</i>	wholeExons	NM_004448.3
<i>ERBB3</i>	wholeExons	NM_001982.3
<i>ERBB4</i>	wholeExons	NM_005235.2
<i>ESR1</i>	wholeExons	NM_000125.3
<i>FGF19</i>	wholeExons	NM_005117.2
<i>FGF3</i>	wholeExons	NM_005247.2
<i>FGF4</i>	wholeExons	NM_002007.2
<i>FGFR1</i>	wholeExons&selectedIntrons	NM_023110.2
<i>FGFR2</i>	wholeExons	NM_000141.4
<i>FGFR3</i>	wholeExons&selectedIntrons	NM_000142.4
<i>FLT3</i>	wholeExons	NM_004119.2
<i>HRAS</i>	wholeExons	NM_005343.3
<i>IDH1</i>	wholeExons	NM_005896.3
<i>IDH2</i>	wholeExons	NM_001289910.1
<i>IGF1R</i>	wholeExons	NM_000875.4
<i>JAK1</i>	wholeExons	NM_001320923.1
<i>JAK2</i>	wholeExons	NM_004972.3
<i>KDR</i>	wholeExons	NM_002253.2
<i>KIT</i>	wholeExons	NM_000222.2
<i>KRAS</i>	wholeExons	NM_033360.3
<i>MAP2K1</i>	wholeExons	NM_002755.3
<i>MET</i>	wholeExons	NM_000245.3
<i>MTOR</i>	wholeExons	NM_004958.3
<i>MYC</i>	wholeExons	NM_002467.4
<i>NF1</i>	wholeExons	NM_000267.3
<i>NOTCH1</i>	wholeExons	NM_017617.4
<i>NRAS</i>	wholeExons	NM_002524.4
<i>NRG1</i>	intronOnly	NM_001159999.2
<i>NTRK1</i>	wholeExons&selectedIntrons	NM_001007792.1
<i>NTRK2</i>	wholeExons	NM_006180.4
<i>NTRK3</i>	wholeExons	NM_001012338.2
<i>PDGFRA</i>	wholeExons	NM_006206.4
<i>PIK3CA</i>	wholeExons	NM_006218.3
<i>PTCH1</i>	wholeExons	NM_000264.3
<i>PTEN</i>	wholeExons	NM_000314.6
<i>RAF1</i>	wholeExons	NM_002880.3
<i>RB1</i>	wholeExons	NM_000321.2
<i>RET</i>	wholeExons&selectedIntrons	NM_020975.4
<i>ROS1</i>	wholeExons&selectedIntrons	NM_002944.2
<i>SMAD4</i>	wholeExons	NM_005359.5
<i>SMO</i>	wholeExons	NM_005631.4
<i>STK11</i>	wholeExons	NM_000455.4
<i>TOP2A</i>	wholeExons	NM_001067.3
<i>TP53</i>	wholeExons	NM_000546.5
<i>TSC1</i>	wholeExons	NM_000368.4
<i>TSC2</i>	wholeExons	NM_000548.4
<i>UGT1A1</i>	SNP	NM_000463.2