

Supplementary Table 2 : Conditions of DNA sequencing used in this study for various genes.

Amplicon	Sequence oligonucleotide: Forward 5'-3'	Sequence oligonucleotide: Reverse 5'-3'	Annealing	Size PCR product (bp)	PCR conditions	Sequencing oligonucleotide
BRAF exon 11	TCCCTCTCAGGCATAAGGTAA	CGAACAGTGAATATTTCTTTGAT	60°C	313	Hot Star Taq Qiagen	F + R
BRAF exon 15	TCATAATGCTTGTCTGTAGTAGGA	GGCCAAAAATTTAATCAGTGGA	60°C	224	Hot Star Taq Qiagen	F + R
JAK2 exon 12	CTCCTCTTTGGAGCAATTCA	TATCGCAACTCCCAAGTTCTC	55°C	496	Hot Star Taq Qiagen	internal oligo TGAATA GTCCCTACAGTGTTCAGTTT
RAF1 exon 7	GGTGTACAGGTAGAGTTTGCCC	TCCTTGATCAGATTTGAAACCC	54°C	363	Hot Star Taq Qiagen	F + R
HRAS exon 1	GGAGACCCTGTAGGAGGACC	GAGGAAGCAGGAGACAGGG	60°C	282	Hot Star Taq Qiagen	R + F
HRAS exon 2	ATGAGGGGCATGAGAGTACCAG	CATCCAGGACATGCCGAGAGA	60°C	377	Hot Star Taq Qiagen	F + R
HRAS exon 3	TCTCTGCCGATGTCTGGAT	TAGCCCCACTAAGACTCAGAACCA	60°C	619	Hot Star Taq Qiagen	F + R
HRAS exon 4	AAGGCTTGATCCACAGCA	ACCTCCATGTCTGAGCTTGT	60°C	340	Hot Star Taq Qiagen	F + R
KRAS exon 1	GACTGAATATAAACTTGTGG	CTCTATTGTTGGATCATAT	45°C	109	Ampli Taq Gold Applied Biosystem	F + R
KRAS exon 2	GCCATTTGTCCGTCATCTTTGGAG	TGCATGGCATTAGCAAAGACTCA	55°C	415	Hot Star Taq Qiagen + MgCl2	F + R
KRAS exon 3	AGGAAGGAAAATTTGGTGTAGTGG	AGAAGCAATGCCCTCTCAAGAGAC	54°C	452	Hot Star Taq Qiagen	F + R
KRAS exon 4a	CTTGACATGGCTTTCCAGTA	AGTGGTTGCCACCTTGTACCT	54°C	272	Hot Star Taq Qiagen	F + R
KRAS exon 4b	CCTGTACACATGAAGCCATCGT	CTAACAGTCTGCATGGAGCAGGAA	54°C	299	Hot Star Taq Qiagen	F + R
NRAS exon1	TGTAGATGTGGCTCGCCAAT	TGATCCGACAAGTGAGAGAC	55°C	228	Hot Star Taq Qiagen	F + R
NRAS exon 2	GGCAATAGCATTGCATTCCC	TCCCTAGTGTGGTAACCTCA	55°C	344	Hot Star Taq Qiagen	F + R
RUNX1 exon 1	GCTGAAACAGTGACCTGTCTTGG	AGCTGCCATTTTACAGGCAAAGC	58°C	219	Hot Star Taq Qiagen	F + R
RUNX1 exon 2	CTCCAGTGCTAAAAAGTGAAG	CATATACACATCTATGAAGGTGTGATC	58°C	212	Ampli Taq Gold Applied Biosystem	internal oligo GTCGGGAAAGTTAATT
RUNX1 exon 3	CGGCTTGTGTGATGCGTATCC	ACCACCCCTCCGGGCCAGTA	58°C	304	Ampli Taq Gold Applied Biosystem + Q solution (Qiagen)	F + R
RUNX1 exon 4	CTGCATTTGTCCTTTGACTGGTG	GTGGGTTTGTGCCATGAAACGTG	58°C	239	Hot Star Taq Qiagen	F + R
RUNX1 exon 5	CAGGCCACCAACCTCATTCTGTT	GCCCCAAGTGGATGCACCTTAC	58°C	173	Hot Star Taq Qiagen	F + R
RUNX1 exon 6	CAATACTTTTTCTGATCTCTCCCT	TGGGCTCCATCTGGTACTTACCC	58°C	286	Ampli Taq Gold Applied Biosystem	R + internal oligo GCAGAACTAGATGATCAGAC
RUNX1 exon 7	CCCACCCCACTTTACATATAATTGACC	CCCAGCTCAGCTCAAAGAATGTG	58°C	246	Hot Star Taq Qiagen	F + R
RUNX1 exon 8a	CTCACTCCGCTCCGTTCTCT	GGCCGAGGCGCCGTAGTACAGG	58°C	301	Ampli Taq Gold Applied Biosystem + Q solution (Qiagen)	F + R
RUNX1 exon 8b	CCAGCTCGCCCTCTACCA	TTGTGCGGAACAGGAGGCC	63°C	329	Ampli Taq Gold Applied Biosystem + Q solution (Qiagen)	F + R
SOS1 exons 7 and 8	ATTGTGCTCGCATAGTCGTG	AAATTCACACTGAATATGTTACAAA	60°C	426	Hot Star Taq Qiagen	F (ex7) + R (ex8)
SOS1 exon 9	TGCTCCCCATTTCTTTTCAG	CTTGAGGAGGGAAGTGGGAT	60°C	500	Hot Star Taq Qiagen	F + R
SOS exon 10	CATGAGCTCTAGGTTTCTGTCA	GCCAAGTGACCTCATTTTCTC	60°C	950	Hot Star Taq Qiagen	F + internal oligo GA TGACACCAATGAATACAAGCA
SOS1 exon 11	GCAGTGCATTACCAAGTCCA	TTGTTCACTGACAAGTCCATTTT	60°C	591	Hot Star Taq Qiagen	F + R
SPRED1 exon2	GGTACCCTTCTGGGTGAGG	AAGTTTTCGATGGGTCTGG	59°C	269	Hot Star Taq Qiagen	F + R
SPRED1 exon3	AAACACCTTAGTCACCACATGTTA	TGCCTTTAACACAGAAACAGC	55°C	431	Hot Star Taq Qiagen	F + R
SPRED1 exon4	AGCGTTGTATCACCTCAGTTTG	TGAGGTTTCAAAGCCTGGTC	55°C	398	Hot Star Taq Qiagen	F + R
SPRED1 exon5	TTAATTGCCAGGCAGTCCAG	ATGAGGGATGCTCAACCTGT	55°C	340	Hot Star Taq Qiagen	F + R
SPRED1 exon6	CATTTGAGTTTTGGGAATTGCT	GGGCAGATGGTTTTAACGTC	55°C	398	Hot Star Taq Qiagen	F + R
SPRED1 exon7	GGGGAAATGATTCTATTTTATTC	CAGCGTTTAAAGCACATAGGC	55°C	396	Hot Star Taq Qiagen	F + R
SPRED1 exon8-5'	TGCTTTCTCATAGTCCACCA	GGAGCATCTGACATTTTCC	55°C	552	Hot Star Taq Qiagen	F + R
SPRED1 exon8-3'	AGACGCAGCCTTCTCATT	AGTTAGGCATGGCGTGAAC	55°C	569	Hot Star Taq Qiagen	F + R
STK11 exon 1	ACAATCGTTTCTGTTGGAAG	CCAGCTCAGGGTGTAAAGAG	55°C	579	Hot Star Taq Qiagen	F + R
STK11 exon 2	CACTGTGAACCTCACGCTTCTC	AGCCATTGCCACAATGGCTGACTTC	55°C	390	Hot Star Taq Qiagen	F + R
STK11 exon 3	CCTGAGCTGTGTCTTACGCG	ATATCAGGACAAGCAGTGTG	55°C	212	Hot Star Taq Qiagen	F + R
STK11 exons 4 and 5	GTGTGGCTCCCTGCTGGACCTAGCCTTTC	TACATTTCCATAAAGTAAGCACCCCTA	55°C	667	Hot Star Taq Qiagen	F + R
STK11 exon 6	CGTCAACCACCTTGACTGACCACG	CCTGTGGGGTCTCGGGCCAAATAG	55°C	289	Hot Star Taq Qiagen	F + R
STK11 exon 7	TTAGGAGCGTCCAGGTATCACCC	ACCCACCACGCGCTGCTAGCG	55°C	271	Hot Star Taq Qiagen	F + R
STK11 exon 8	GAGGACATGGCTGAGCTTCTGTGGT	AAGCTGTCTTGTGTCAGACA	55°C	443	Hot Star Taq Qiagen	F + R
STK11 exon 9	CAGCATTCAGGCTGGATACACCT	ACGGTCACCATGACTGACTA	55°C	465	Hot Star Taq Qiagen	F + R