

**Supplementary Table S1.** The primers used in PCR amplification of *KRAS*, *NRAS*, and *BRAF*.

Target genes	Mutational hotspots	Forward primer	Reverse primer
<i>KRAS</i>	Exon 2	5'-TCATTATTTTATTATAAGGCCTG CTGAA -3'	5'- CAAAGACTGGTCCTGCACCAGTA -3'
	Exon 3	5'-TGG AGA AAC CTG TCT CTT GGA-3'	5'-TTT AAA CCC ACC TAT AAT GGT GAA-3'
	Exon 4	5'-TTT TTC TTT CCC AGA GAA CAA AT-3'	5'-AAG AAG CAA TGC CCT CTC-3'
<i>NRAS</i>	Exon 2	5'-GAT GTG GCT CGC CAA TTA AC -3'	5'-GAA TAT GGG TAA AGA TGA TCC GA-3'
	Exon 3	5'- CCC AGG ATT CTT ACA GAA AAC-3'	5'-TAA TAT CCG CAA ATG ACT TGC-3'
	Exon 4	5'-CCC GTT TTT AGG GAG CAG AT-3'	5'-TGC ACA AAT GCT GAA AGC TG-3'
<i>BRAF</i>	codon 600	5'-CATAATGCTTGCTCTGATAGG AAA-3'	5'-TCAGCACATCTCAGGGCCAAA -3'