

**S1 Table.** Primers used in this study

Gene	Exon	Sequence
<i>BRAF</i>	15	F: 5'-biotin-GCTTGCTCTGATAGGAAAATGA-3'
		R: 5'-GACAACTGTTCAAACCTGATGGG-3'
		S: 5'-CCACTCCATCGAGATTT-3'
<i>NRAS</i>	1	F: 5'-GGTGTGAAATGACTGAGTACAAACTGG-3'
		R: 5'-biotin-CATATTCATCTACAAAGTGGTTCTGGA-3'
		S: 5'-CAAACCTGGTGGTGGTTGGAG-3'
	2	F: 5'-GATTCTTACAGAAAACAAGTGGTTATAGAT-3'
		R: 5'-biotin-GCAAATACACAGAGGAAGCCTTCG-3'
		S: 5'-GACATACTGGATACAGCTGG-3'
<i>GNAQ</i>	4	F: 5'-GCCTACGCAACAAGATGTGCT-3'
		R: 5'-biotin-GGTATTCGATGATCCCTGTGGT-3'
		S: 5'-AACAAGATGTGCTTAGAGTT-3'
	5	F: 5'-CAGAATGGTCGATGTAGGG-3'
		R: 5'-biotin-GACATTTTCAAAGCAGTGTATCCA-3'
S: 5'-AATGGTCGATGTAGGG-3'		
<i>GNAI1</i>	4	F: 5'-ATCGCCACCTTGGGCTACC-3'
		R: 5'-biotin-CTCGATGATGCCGGTGGT-3'
		S: 5'-GACGTGCTGCGGGTC-3'
	5	F: 5'-biotin-CTGGCGCTGTGTCCTTTCA-3'
		R: 5'-ACTTCCCTCCGCTCCGACC-3'
S: 5'-TCCTCCGCTCCGACC-3'		
<i>KIT</i>	17	F: 5'-AAAGATTTGTGATTTTGGTCTAGC-3'
		R: 5'-GAAACTAAAAATCCTTTGCA-3'
<i>GAPDH</i>	2	F: 5'-CACTAGGCGCTCACTGTTCT-3'
		R: 5'-GCGAACTCACCCGTTG-3'

F, forward primer; R, reverse primer; S, sequencing primer.