

Table 3. Primers used for amplification of vaccine-associated SNPs for pyrosequencing

Primer name	Position (5'-3')	Product size	Sequence (5'-3')	Annealing temperature (°C)
560 F	504-521	117	CTGTCGTGGTCGCCATTG	55.1
560 R (Biotin)	603-620		7ATACACGGCGGACAAAGGT	
560 Seq	542-559		CCTCCCAACTCAACTACA	
19431 F	19409-19426	143	GACCGCTTGGTTGGTTT	52.3
19431 R (Biotin)	19530-19551		7TGCACTACTACCTACGCCACTACA	
19431 Seq	19413-19428		CGTTTGGTTGGTTTCT	
89734 F (Biotin)	89710-89730	55	7AACTACCGCCCCAAATTAAC	59.7
89734 R	89746-89764		ATAGGCACAACGGCGAAAC	
89734 Seq	89738-89752		GCGAAACAGCTCCCA	
97748 F	97718-97743	60	ACCTTGGAGTTATTGTCTGGAACAAA	62
97748 R (Biotin)	97758-97777		7CCCATTAACCGCTGCTTCGT	
97748 Seq	97730-97746		TTGTCTGGAACAACAAA	
105169 F (Biotin)	105131-105151	174	7CCGTTCCGCTTTTATTAACAA	52
105169 R	105281-105300		GGTCAAGGTGGAGCTGTTGT	
105169 Seq	105171-105184		TTCTCGTGAGCGCCA	
105356 F	105280-105300	103	GACAACAGCTCCACCTTGACC	61
105356 R (Biotin)	105365-105382		7CACCGGGTCACTCCTTG	
105356 Seq	105340-105354		GGGCCACCGACACG	
107136 F	107065-107083	116	TCGACTGGCTGGGACTTGC	52
107136 R (Biotin)	107015-107132		7ACCCCGGCCACACAGACT	
107136 Seq	107115-107132		TGGACACACAGAAAGAGA	
107797 F (Biotin)	107778-107795	50	7CGGGTTCTGGATCGCGG	59.7
107797 R	107806-107827		NNNCGGGGCCACAGACAGAAATC	
107797 Seq	107798-107815		GACAGAAATCATTTTCCC	