

Supplementary Table 1. Primers used in a qPCR analysis

Target gene	Primer name	Nucleotide sequence (5'-3')
<i>EF1</i>	PS1	GGCTTTCACCGACTACCCCTCCTCT
	PS2	ACTTCTCGACGGCCTTGATGACAC
FGSG_09210	5F	ATCCCGGCCATCGCAAAAG
	3R	TGTCGTCCGATCAAAGCAGAGTTAC
FGSG_09896	5F	ACCTGGTGCTGTGTTATTGATTTC
	3R	GGGGTTAATAGAAGGGTTTGTCTATA
FGSG_03638	5F	CCGTTCAAAGGGTTCAGAGA
	3R	AGGTTAGGGTACTTGTCACTGTC
FGSG_08210	5F	CCAGCTGCCTCGTCGATGTCTCC
	3R	TAGAGGTTCGATGGCGGGGTTAC
FGSG_13952	5F	GACTACCGGACTCTTGACCATC
	3R	TTCAACAACCTCGACACCCATAG

qPCR, quantitative real-time PCR.

Supplementary Table 2. Primers used in generating DNA constructs for targeted gene deletions

Gene	No.	Primer name	Nucleotide sequence (5'-3')
FGSG_09210	p1	5' F	CAGTCCTTCGCTTCTCGTGG
	p2	5' R	CAGGTACACTTGTTTAGTTTCGGAAAAGATGATGTAAAGATGG
	p3	3' F	TCAATATCATCTTCTGTCTCGAGAGACATACATGGGGTGGAG
	p4	3' R	GGGTTAGTAAGTTGGAGATTTTCAG
	p5	5' FN	CCCGCAATGTAAGTGGTGGCAGTAGG
	p6	3' RN	GTAAGCCCCCAGACTAGCAGGACAGAAATG
	p7	Inner F	CTGCAAAGAAGTCTCGGATAAATGT
	p8	Inner R	GCGTCGAACACGATGAATAGAG
FGSG_09896	p1	5' F	GAGTCAGGGCAACAGAGGTATAG
	p2	5' R	CAGGTACACTTGTTTAGGTATTTTGTTC AAGACTAAGGGTGA
	p3	3' F	TCAATATCATCTTCTGTCTCGGTGTTGCTGGGCGACTGATGG
	p4	3' R	GTATGCCGGCCCTGAAGTAGATGTA
	p5	5' FN	AGAGCCCGGATTTCTAACACCA
	p6	3' RN	CCTCCAAAGAAGACCAAGCCAGT
	p7	Inner F	CGAACTCTACACTCAAGCCCTCAA
	p8	Inner R	GCAAGCCCGCAAGAGTGATAAA
FGSG_03638	p1	5' F	CAGTATCATTGGGGCTTCA
	p2	5' R	CAGGTACACTTGTTTAGACTAAGTTTGGAGATCTTACGAA
	p3	3' F	TCAATATCATCTTCTGTCTCTCACC CATATCAAGTTACAT
	p4	3' R	TCGACCATTGGACATCTTTC
	p5	5' FN	CGCATACCCGTGAAGAGATAGG
	p6	3' RN	GCCCAAGATCCAAGCCATTC
	p7	Inner F	ACCGGACACCATTGCTAACTACATT
	p8	Inner R	AGCTGATGATCCTGGTACTCGTGAC

(Continued)

Supplementary Table 2. Continued

Gene	No.	Primer name	Nucleotide sequence (5'-3')
FGSG_08210	p1	5' F	AAGTCTTGCTGAATGCGTAGG
	p2	5' R	CAGGTACACTTGTTTTAGTTGATGTTTGAGGTTGAGTGTCTTA
	p3	3' F	TCAATATCATCTTCTGTCTGTTATGGAGTTGAGTGTGATTGAGAC
	p4	3' R	TTTCGCATTTGACCTTCGTA
	p5	5' FN	TGGCAACAACAGCAACATCT
	p6	3' RN	AGCATTCCATCCTTCAACTCTT
	p7	Inner F	CCTTCAATATGATTGCCTCCA
	p8	Inner R	GACAAGCGTCTCAATCACACTC
FGSG_13952	p1	5' F	CTATGAGATTTCGTCGTTGGATGTT
	p2	5' R	CAGGTACACTTGTTTTAGTGTTGTAGTATGTGTTGCTTGTGG
	p3	3' F	TCAATATCATCTTCTGTCTGACAATGACAACCCGATACC
	p4	3' R	AATATTCCTCTTGAGCCCACTG
	p5	5' FN	AGACATGACGTGGTTGCTGACTTTC
	p6	3' RN	CATGCAAAAGTCAACTGTCGTAGA
	p7	Inner F	CATTGTTTCGCGAAGTGGTAA
	p8	Inner R	GATTTAGTTGCTTGGTTTCCTCA
Geneticin resistance gene	p9	Gen F	CTCTAAACAAGTGTACCTGTGC
	p10	Gen R	TCAATATCATCTTCTGTCTG
	p11	Gen 5FN	TGCTGCTTGGACAAATGAACG
	p12	Gen 3RN	CCGCTTGGGTGGAGAGGCTATT