

S2 Table. Oligonucleotide primers for plasmid construction.

Plasmid	Sequence of relevant primers (5'-3')¹	Description
pSC601	TATA <u>CTAG</u> AATTCTCGCGGCCGATGATG	Forward primer to clone upstream region of SMDB11_2276 in pKNG101 (<i>Xba</i> I)
	TATGA <u>AGCTT</u> GTCCAACATGAGAACGTCCTCTG	Reverse primer to clone upstream region of SMDB11_2276 in pKNG101 (<i>Hind</i> III)
	TGTAA <u>AGCTTTT</u> CCCCGAAATCCTGATGCC	Forward primer to clone downstream region of SMDB11_2276 in pKNG101 (<i>Hind</i> III)
	TATAG <u>GGCCCT</u> GGTGTGGATCAGTTCATCATC	Reverse primer to clone downstream region of SMDB11_2276 in pKNG101 (<i>Apa</i> I)
pSC602	TATA <u>CTAG</u> AGCCTTTCCCCATTGAGCTG	Forward primer to clone upstream region of SMDB11_2244 in pKNG101 (<i>Xba</i> I)
	TATAA <u>AGCTT</u> AAGACGATCCATACTATTCCCCG	Reverse primer to clone upstream region of SMDB11_2244 in pKNG101 (<i>Hind</i> III)
	TGTAA <u>AGCTT</u> GCGATCTTCTTGTAAGGGACTCC	Forward primer to clone downstream region of SMDB11_2244 in pKNG101 (<i>Hind</i> III)
	TATAG <u>TCGAC</u> ATCGCAGCGAGCAATACG	Reverse primer to clone downstream region of SMDB11_2244 in pKNG101 (<i>Sa</i> II)
pSC706	TGTG <u>ICTAG</u> ATTAAGTGCATGCTTGCTTATCACC	Forward primer to clone upstream region of SMDB11_2263 in pKNG101 (<i>Xba</i> I)
	TACT <u>CGAGA</u> AATAGCCATAGTTTCTTCACTCTTTATT AAGGG	Reverse primer to clone upstream region of SMDB11_2263 in pKNG101 (<i>Xho</i> I)
	TACT <u>CGAGA</u> AACCGCGAAGCTTAATCTTCC	Forward primer to clone downstream region of SMDB11_2263 in pKNG101 (<i>Xho</i> I)
	TATAG <u>GGCCCC</u> CGTAGTTTTTGAGGTACTCTTCG	Reverse primer to clone downstream region of SMDB11_2263 in pKNG101 (<i>Apa</i> I)
pSC707	TATA <u>CTAG</u> AGCTAAAGCGTTGTTCAACACG	Forward primer to clone upstream region of SMDB11_3455 in pKNG101 (<i>Xba</i> I)
	TATAA <u>AGCTT</u> GGCCATTGTCGCCGGATC	Reverse primer to clone upstream region of SMDB11_3455 in pKNG101 (<i>Hind</i> III)
	TATAA <u>AGCTT</u> AAAGAGAGCTAAGCGATTCTGG	Forward primer to clone downstream region of SMDB11_3455 in pKNG101 (<i>Hind</i> III)
	TATAG <u>TCGACC</u> ACCCGATTATTCGATTCTGTG	Reverse primer to clone downstream region of SMDB11_3455 in pKNG101 (<i>Sa</i> II)
pSC708	TATA <u>CTAG</u> ATTCCGAATAAAAACGACTTACTGTC	Forward primer to clone upstream region of SMDB11_3456 in pKNG101 (<i>Xba</i> I)
	TATAA <u>AGCTT</u> TGCCATGATTTTATCACCCG	Reverse primer to clone upstream region of SMDB11_3456 in pKNG101 (<i>Hind</i> III)
	TATAA <u>AGCTT</u> AATAAAGAAAGCTAATCACATTACGGT GC	Forward primer to clone downstream region of SMDB11_3456 in pKNG101 (<i>Hind</i> III)
	TATAG <u>TCGACT</u> TCAAACCTGAAATCATTAAAGGCATTG	Reverse primer to clone downstream region of SMDB11_3456 in pKNG101 (<i>Sa</i> II)
pSC727	TATA <u>CTAG</u> AATCACCGGCAATCAGTCTTTC	Forward primer to clone upstream region of SMDB11_2244 in pKNG101 (<i>Xba</i> I)
	TACT <u>GCAG</u> CAAGAAGATCGCCAGCGC	Reverse primer to clone upstream region of SMDB11_2244 in pKNG101 (<i>Pst</i> I)
	TACT <u>GCAG</u> CATCATCATCATCACTAAAGGGACT CCCATGTCGAAG	Forward primer to clone downstream region of SMDB11_2244, incorporating His ₆ tag, in pKNG101 (<i>Pst</i> I)
	TATAG <u>TCGAC</u> GATCGCAGCGAGCAATACG	Reverse primer to clone downstream region of SMDB11_2244 in pKNG101 (<i>Sa</i> II)
pSC728	TATA <u>CTAG</u> AGACTTTATCAACGGCGATCC	Forward primer to clone upstream region of SMDB11_2276 in pKNG101 (<i>Xba</i> I)

	TATA <u>CTGCAGG</u> GATTTTCGGGAACAGCTGATC	Reverse primer to clone upstream region of SMDB11_2276 in pKNG101 (<i>Pst</i> I)
	TATA <u>CTGCAGC</u> ATCATCATCATCACTGATGCCGACGCGGCCCTG	Forward primer to clone downstream region of SMDB11_2276, incorporating His ₆ tag, in pKNG101 (<i>Pst</i> I)
	TATAGGGCCCCGAAAACCGACGATCAGC	Reverse primer to clone downstream region of SMDB11_2244 in pKNG101 (<i>Apa</i> I)
pSC733	TATA <u>TCTAGAC</u> CCAGGTCGTCAACCTGTTGC	Forward primer to clone upstream region of SMDB11_2250 in pKNG101 (<i>Xba</i> I)
	TGTG <u>ACTAGT</u> AAACATAAAAAGGCCTCCGCAG	Reverse primer to clone upstream region of SMDB11_2250 in pKNG101 (<i>Spe</i> I)
	TATA <u>ACTAGT</u> CTGCTTGCGCCCTGATGAC	Forward primer to clone downstream region of SMDB11_2250 in pKNG101 (<i>Spe</i> I)
	TATAGGGCCCCAGCGATAGGGGTCGTCATCATAG	Reverse primer to clone downstream region of SMDB11_2250 in pKNG101 (<i>Apa</i> I)
pSC737	TATA <u>ACTAGT</u> TTTCATACGGCGCCTGCC	Forward primer to clone upstream region of SMDB11_0927 in pKNG101 (<i>Xba</i> I)
	TATA <u>ACTAGT</u> CAGGTGAATTAGTTCGCCTCG	Reverse primer to clone upstream region of SMDB11_0927 in pKNG101 (<i>Spe</i> I)
	TATA <u>ACTAGT</u> GCCACAATCAAGGAAGAATATG	Forward primer to clone downstream region of SMDB11_0927 in pKNG101 (<i>Spe</i> I)
	TATAGGGCCCCATCGCTATCGGCGCCTTTTTTC	Reverse primer to clone downstream region of SMDB11_0927 in pKNG101 (<i>Apa</i> I)
pSC739	TATA <u>ACTAGT</u> TTTCATACGGCGCCTGCC	Forward primer to clone upstream region of SMDB11_0927 in pKNG101 (<i>Xba</i> I)
	TATA <u>ACTAGT</u> CAGGTGAATTAGTTCGCCTCG	Reverse primer to clone upstream region of SMDB11_0927 in pKNG101 (<i>Spe</i> I)
	TATA <u>ACTAGT</u> CAGGTGAATTAGTTCGCCTCG	Forward primer to clone downstream region of SMDB11_0929 in pKNG101 (<i>Spe</i> I)
	TATAGGGCCCTTCCTGTTCGGCGCCTATGTG	Reverse primer to clone downstream region of SMDB11_0929 in pKNG101 (<i>Apa</i> I)
pSC671	TATA <u>TCTAGAG</u> GATCTCAACCAGCCTGGC	Forward primer for 1 st PCR fragment for overlap PCR to construct 3xFLAG-SMDB11_2278 allele in pKNG101 (<i>Xba</i> I)
	CACCGTCATGGTCTTTGTAGTCCATGGCTATTGTTTCATGTGTTTCG	Reverse primer for 1 st PCR fragment for overlap PCR to construct 3xFLAG-SMDB11_2278 allele in pKNG101
	CGAACACAGTGAACAATAGCCATGGACTACAAAGACCATGACGGTG	Forward primer for 2 nd PCR fragment for overlap PCR to construct 3xFLAG-SMDB11_2278 allele in pKNG101
	GCTGCCCAGATCTCAGCCTTGTCATCGTCATCCTTGTAATC	Reverse primer for 2 nd PCR fragment for overlap PCR to construct 3xFLAG-SMDB11_2278 allele in pKNG101
	GATTACAAGGATGACGATGACAAGGCTGAGATCTGGGCAGC	Forward primer for 3 rd PCR fragment for overlap PCR to construct 3xFLAG-SMDB11_2278 allele in pKNG101
	TATAGGGCCCCGTTGATAAATACTTTACTGGAGC	Reverse primer for 3 rd PCR fragment for overlap PCR to construct 3xFLAG-SMDB11_2278 allele in pKNG101 (<i>Apa</i> I)
pSC1050	TATA <u>TCTAGAG</u> AAGCTGTACTGGTAATGCGC	Forward primer to clone upstream region of SMDB11_1609 in pKNG101 (<i>Xba</i> I)
	TATAG <u>TCGAC</u> GACATGCGAGGATCCTTTTG	Reverse primer to clone upstream region of SMDB11_1609 in pKNG101 (<i>Sal</i> I)
	TATAG <u>TCGAC</u> GGCGGCCTAACGATGAACTC	Forward primer to clone downstream region of SMDB11_1609 in pKNG101 (<i>Sal</i> I)

	TATAGGGCCCCGATCGGAGACCTTATACAGCCAATC	Reverse primer to clone downstream region of SMDB11_1609 in pKNG101 (<i>ApaI</i>)
pSC622	TATAAGATCTATGGATCGTCTTATCATTGCG	Forward primer to clone SMDB11_2244 in pSUPROM (<i>BglII</i>)
	TATATCTAGATTACAAGAAGATCGCCAGCG	Reverse primer to clone SMDB11_2244 in pSUPROM (<i>XbaI</i>)
pSC623	TATATCTAGAATGTTGGACCGCATTATTGC	Forward primer to clone SMDB11_2276 in pSUPROM (<i>XbaI</i>)
	TATAGTCGACTCAGGATTTCCGGGAACAGC	Reverse primer to clone SMDB11_2276 in pSUPROM (<i>SalI</i>)
pSC715	TATAGGATCCATGGCTATTGATATGTTCTGAAAGTTG	Forward primer to clone SMDB11_2263 in pSUPROM (<i>BamHI</i>)
	TATATCTAGATTAAGCTTCGCGGTTTTCTTG	Reverse primer to clone SMDB11_2263 in pSUPROM (<i>XbaI</i>)
pSC734	TATAGGATCCATGTTTGCCAACAGCCAAATG	Forward primer to clone SMDB11_2250 in pSUPROM (<i>BamHI</i>)
	TATATCTAGATCAGGGCGCAAGCAGCAAC	Reverse primer to clone SMDB11_2250 in pSUPROM (<i>XbaI</i>)
pSC772	TATAGGATCCGTGATAATTTGCCCATACCCTATTTAG	Forward primer to clone SMDB11_0927 in pSUPROM (<i>BamHI</i>)
	TATATCTAGATCATATTCTCCCTTGATTGTGGC	Reverse primer to clone SMDB11_0927 in pSUPROM (<i>XbaI</i>)
pSC697	TATACATATGGACTACAAAGACCATGACGGTG	Forward primer to amplify N-term region of 3xFLAG-SMDB11_2278 from pSC671 to replace the corresponding region in pSC643 (pBAD18-Rhs1) (<i>NdeI</i>)
	CCATAATCCCAGAAGCTTTGCG	Reverse primer to amplify N-term region of 3xFLAG-SMDB11_2278 from pSC671 to replace the corresponding region in pSC643 (pBAD18-Rhs1) (<i>HindIII</i>)
pSC788	TATATCTAGAAAGGACCTTACGATGACCGAAGC	Forward primer to clone SMDB11_1609 and SMDB11_1610 in pSUPROM (<i>XbaI</i>)
	TGTGGTCGACTTAAATGGTAACTATCTTATCTTTTGCTATACCCACAG	Reverse primer to clone SMDB11_1609 and SMDB11_1610 in pSUPROM (<i>SalI</i>)
pSC791	TGTGGAATCTCTAGAAAGAGGATGTAAAATGCAACTAGATACTTATGACGG	Forward primer to clone SMDB11_2278A into pSC643 (<i>EcoRI</i>)
	TGTGGAGCTCTTAATAAATTATGTTATTCCTTTTGCAATATTTTCG	Forward primer to clone SMDB11_2278A into pSC643 (<i>SacI</i>)
pSC699	TATACTGCAGGTAAAGAGGAGGAGCCATGGCTGAGATCTGG	Forward primer to clone SMDB11_2278 (amino acids 1-422) in pUT18 (<i>PstI</i>)
	TATAGGATCCGACAGGCGGGAAGGGGTCTG	Reverse primer to clone SMDB11_2278 (amino acids 1-422) in pUT18 (<i>BamHI</i>)
pSC700	TATAGTCGACGTAAAGAGGAGGTACGATGACCGAAGCGG	Forward primer to clone SMDB11_1610 (amino acids 1-363) in pUT18 (<i>SalI</i>)
	TATAGGATCCGAGCTCGGCTGCTCGCC	Reverse primer to clone SMDB11_1610 (amino acids 1-363) in pUT18 (<i>BamHI</i>)
pSC688	TATAGGATCCAATGGATTACCTTTCCAGGAAGG	Forward primer to clone SMDB11_2277 in pT25 (<i>BamHI</i>)
	TATAGGTACCCTATTGTTCACTGTGTTCCGGTC	Reverse primer to clone SMDB11_2277 in pT25 (<i>KpnI</i>)
pSC689	TATAGGATCCAATGTCCGCTTTATCCCGCTG	Forward primer to clone SMDB11_1609 in pT25 (<i>BamHI</i>)
	TATAGGTACCTTACGCAAAGAGTTCATCGTTAGG	Reverse primer to clone SMDB11_1609 in pT25 (<i>KpnI</i>)
pSC048	TATAGCATGCGTAAAGAGGAGGTGTGATGATGAAAGATGCTCATAAGG	Forward primer to clone SMDB11_2253 in pUT18 (<i>SphI</i>)

	TATATCTAGAGACCGGTCCGTATGGCTGC	Reverse primer to clone SMDB11_2253 in pUT18 (<i>Xba</i> I)
pSC053	TATAGGATCCAATGATGAAAGATGCTCATAAGGTTGT C	Forward primer to clone SMDB11_2253 in pT25 (<i>Bam</i> HI)
	TATAGGTACCTTACCGGTCCGTATGGCTG	Reverse primer to clone SMDB11_2253 in pT25 (<i>Kpn</i> I)
pSC690	TATAGGATCCAATGGCTGAGATCTGGGCAG	Forward primer to clone SMDB11_2278 (amino acids 1-422) in pT25 (<i>Bam</i> HI)
	TATAGGTACCTTACAGGCGGGAAGGGGTC	Reverse primer to clone SMDB11_2278 (amino acids 1-422) in pT25 (<i>Kpn</i> I)
pSC686	TATAGCATGCGTAAAGAGGAGGATCCATGGATTACCT TTTCCAGG	Forward primer to clone SMDB_2277 in pUT18 (<i>Sph</i> I)
	TATATCTAGAGATTGTTCCTGTTCCGGTCAAG	Reverse primer to clone SMDB11_2277 in pUT18 (<i>Xba</i> I)
pSC1056	TATAGCATGCGTAAAGAGGAGGTCGCATGTCCGCTTT ATCC	Forward primer to clone SMDB_1609 in pUT18 (<i>Sph</i> I)
	TATATCTAGAGAGGCCGCCCGGTAGCTG	Reverse primer to clone SMDB11_1609 in pUT18 (<i>Xba</i> I)
pSC754	Synthetic insert produced by Life Technologies: Comprises 550 bp immediately upstream of the stop codon of SMDB11_3980, followed by an in-frame HA tag (TATCCTTATGATGTTTCTGATTATGCA), the final five codons of SMDB11_3980 (including stop), and then 535 bp downstream of SMDB11_3980.	

¹Incorporated restriction sites for cloning into the respective vector are underlined.