

**Table S1. Oligonucleotides used in the study.**

Name	Sequence 5'-3'	Specificity
d1	CGATGGCTGTGTAGAAGTACTCGC	within <i>hph</i>
d2	ATCCGCCTGGACGACTAAACCAA	
426-3	CCCGATTTAGAGCTTGACGG	within pRS426 (nt 1651-1670)
426-5	AGCAGAGCGAGGTATGTAGG	within pRS426 (nt 2935-2954)
1722-fw	GACTATCAACTATCTGGGGG	detection of <i>chs7</i>
1722-rv	CTATCCCCTCGAACTCTGCC	
1722 5-fw	GTAACGCCAGGGTTTTCCAGTCACGACGGGCAACAT TACATTCTCCGG	amplification of 5' flank of <i>chs7</i> for knockout construct pΔSMAC_01722
1722 5-rv	CGAGGGCAAAGGAATAGGGTTCCGTTGCTTGTCCCT TCTTTCTCC	
1722 3-fw	GCCCCAAAATGCTCCTTCAATATCAGTTGCGGACAGA GGTAGTTTGGG	amplification of 3' flank of <i>chs7</i> for knockout construct pΔSMAC_01722
1722 3-rv	GCGGATAACAATTTACACAGGAAACAGACCAGTCAC TTTGAGACGGACTTCA	
1722-HI-5	CGGCAGTATGTGCCTTTGGC	detection of homologous integration of <i>chs7</i> 5' flank
1722-HI-3	GGGGCTCCTATGACTATTG	detection of homologous integration of <i>chs7</i> 3' flank
6625-fw	CCGCTCAACACAAATTGCC	detection of <i>sec22</i>
6625-rv	CAAAACAAGAACCTCCACCAC	
6625-5-fw	GTAACGCCAGGGTTTTCCAGTCACGACGGAATTCCA GAGTTGCGCCGTAAGATCACCG	amplification of 5' flank of <i>sec22</i> for knockout construct pΔSMAC_06625
6625-5-rv	CGAGGGCAAAGGAATAGGGTTCCGTTGAGGTGGTGAC GACCTTGGATTTCTCTCG	
6625-3-fw	GCCCCAAAATGCTCCTTCAATATCAGTTGCGCGGATC ATCACAGGCTGAGGCCAT	amplification of 3' flank of <i>sec22</i> for knockout construct pΔSMAC_06625
6625-3-rv	GCGGATAACAATTTACACAGGAAACAGCGAATTTCGC GGTTGCCATTTCTGTCTGGAACC	
6625-HI-5	CCGGGATTAGGTCCAAAATGCC	detection of homologous integration of <i>sec22</i> 5' flank
6625-HI-3	GGAAGTTGTGCGGTTATGTGATGG	detection of homologous integration of <i>sec22</i> 3' flank
Prom6625-fw	CCCTCGAGGTCGACGGTATCGATAGGAACTATTCCCT TGTTGCTCATCC	amplification of 1 kb upstream promoter region of <i>sec22</i>
Prom6625-rv	GCTTCACTTGC GACTTGACTTCGCC	
6625-gfp-fw	GGCGAAGTCAAGTCGCAAGTGAAGC	amplification of <i>sec22-egfp</i> fusion construct
6625-gfp-rv	ATGGCCTCAGCCTGTGATGATCCGCTTACTTGTACAG CTCGTCCATGCCG	
Term6625-fw	CGGCATGGACGAGCTGTACAAGTAAGCGGATCATCAC AGGCTGAGGCCAT	amplification of 1 kb downstream terminator region of <i>sec22</i>
Term6625-rv	GCGGCCGCTCTAGAAGTGGATCATGAGTTCCAGC AACAGCAACAGCA	
SEC22-gfp-fw	ACAGCTACAGATCTAAGCTTATGATCCGCTCAACACA AAT	amplification of <i>sec22</i> with pDS23 overhang
SEC22-gfp-rv	CCTCGCCCTTGCTCACCATAAACAAGAACCTCCACCA CAA	
SSU1	ATCCAAGGAAGGCAGCAGGC	RT-qPCR 18S rRNA
SSU2	TGGAGCTGGAATTACCGCG	
app-for2	GGAGATAGCTGGAGGGCTGA	RT-qPCR <i>app</i>
app-rev2	ATCTCGGGCTGACTTCCATC	
6625-qRT-fw	AGGGACGTCAACCAAGGTCAT	RT-qPCR <i>sec22</i>
6625-qRT-rv	CATCCCTCAACCGACTGCT	

1930-qRT-fw	GGTGAAAAGCTTGACGACCTG	RT-qPCR <i>ykt6</i>
1930-qRT-rv	CCAGACAGCACGAGTTTTGC	
ppg1-for	CTCCGTGACACCACCTTCAG	RT-qPCR <i>ppg1</i>
ppg1-rev	GGAGGCATAGCGCTTCCA	
ppg2for	CGGTATCTCGCCTCTCAACGT	RT-qPCR <i>ppg2</i>
ppg2rev	GTTGTGCTCCCATTGTGCAGA	
Smta-1-for	TGATCCGCACTCACTTCCAT	RT-qPCR <i>Smta-1</i>
Smta-1-rev	GGGAGTGGCATCAACCGTAT	
SmtA-2-for	TCGCCATGACAGCATCTTCT	RT-qPCR <i>SmtA-2</i>
SmtA-2-rev	GTCGAGCGAAAACCTTGAG	
nox1_RT_fw	GGACATGGATAACCACGCAGA	RT-qPCR <i>nox1</i>
nox1_RT_rv	TTCCGCATGCTCTCAAAGAA	
nox2_RT_fw_2	CTGGTTCTTTTCCCGTCTG	RT-qPCR <i>nox2</i>
nox2_RT_rv_2	GGACCATGCTGTCGTGATGT	
sac1_RT_fw	AGGCTTGCACTTCTCTTCGG	RT-qPCR <i>sac1</i>
sac1_RT_rv	TTGAGCAGGCCCGTTAATCT	
SMU3584for	GGTCATGGGCCACAGTCTCG	RT-qPCR <i>pks</i>
SMU3584rev	CGTGGCTGTTTCATCGTGCAC	
SMU6905for	GGCATCACGGTCAATGGTGT	RT-qPCR <i>teh</i>
SMU6905rev	TGCTCAGCCATCATCCTCTCA	
SMU9390for	TCAACATCAACACCCGTGGC	RT-qPCR <i>tih</i>
SMU9390rev	GTAAACAGCGTGCTTGGGCA	
pro41-for	ACATGGAGGCAAATGGGAAG	RT-qPCR <i>pro41</i>
pro41-rev	CGTCTGAGCCAATGATGCTC	