

S8 Table. Primers and plasmid used for the construction of the STE3-2 deletion fragment by overlap extension PCR.

Gene or region to knockout	Plasmid	Primers upstream from gene (5'-3')	Amplified fragment (bp)	Primers for HYG resistance cassette (5'-3')	Amplified fragment (bp)	Primers downstream from gene (5'-3')	Amplified fragment (bp)	Nested primers (5'-3')	Amplified fragment (bp)	Primers (5'-3') used for mutant confirmation and amplification description	Amplified fragment (bp)
Ste3-2	pJet1.2 resistance cassette storage	MP039 - TGTCAGGGCAAAAAGAGAAAAACAAGGGG MP040 - AAGAGCTTGTGTCGGATGAACTGTCGGCTGA TGAGCCGATGATCAGAGGAGTACGATCGAAAGAGAAGAT (Amplified from CBS 6938 gDNA)	1165	MP041 - TCGATATAATCTTCTTTTCGATCGTACTCCTC TGATCATCGGCTCATCAGCCGACAGTTTCATCCGAC MP042 - TATACTACAACATTACCGAAGGTATCAAGGTATC AGGGTAATCATGAGAGATGACGGAGATGATGGTGATG (Amplified from pBS-HYG plasmid)	1899	MP043 - TCTGTTGACCATCACCATCATCTCCGTCATCTCT CATGATTACCCTGATACCTTGATACCTTCGGTAATG MP044 - AACGAGCAAGGAGACAAACAACAGGTCGAG (Amplified from CBS 6938 gDNA)	609	MP045 - GAGAAAAACAAGGGGAGATTTGGG MP046 - ACAGGTCGAGGCAGCAAGGG	3480	MP035 - TTATGCATCAACCGCGTCTGGC MP036 - GGACACAGAGGCAACRGTAGTTCC (Amplification of the Ste3-2 gene (partial))	929
										MP060 - GTGGAACCGACGCCAGC MP061 - GAGGGCTGTTGACGATAGGG (Downstream flanking region of Ste3-2 gene and partial resistance cassette)	1156
										MP063 - TTTGCCCTCGACGAGTGCTGG MP039 - TGTCAGGGCAAAAAGAGAAAAACAAGGGG (Upstream flanking region of Ste3-2 gene and partial resistance cassette)	2542