

**Table S1.** PCR Primers for Recombineering.

Primer	Sequence*	Target
<b>oBBI</b> <b>528</b>	5' Phos- <b>GATGAGATCCTTAACGGGCGGAAAATGCAGGGTCCGGTCATAC</b> <u>GATAGCTGAATGAGTGACGTGC</u>	SGI-4 deletion
<b>oBBI</b> <b>529</b>	5' <b>GCTACGGATTTCATTCCCAGAAAAGCAAAAACCCAGCCATAGGC</b> <u>CATAGAGCAGTGACGTAGTCGC</u>	SGI-4 deletion
<b>oBBI</b> <b>542</b>	5' <b>CACGATGGTGGGAACGATAAAAAAATTAATTCGGCAAACGGGG</b> <u>CATAGAGCAGTGACGTAGTCGC</u>	SGI-4 insertion
<b>oBBI</b> <b>543</b>	5' <b>GAGACTACGAACGATACCTGGACTGATAACGGGACCGCGACGCG</b> <u>CATAGCTGAATGAGTGACGTGC</u>	SGI-4 insertion

\*Bold text indicates homology to the target gene and underlined text indicates homology to oBBI 92/93-*neo* for PCR amplification of the linear knockout fragment.