

**Supplementary Table S1:** List of primers used in this study.

Name of Primer	Gene ID/Name	Sequence	Remarks
BADH2.7PCRF	LOC_Os08g32870	CTTGTTTGGAGCTTGCTGATG	<i>OsBadh2</i> gene sequence
BADH2.7PCR		AGTGAAACAGGCTGTCAAGAA	
BAD2SgF		GGCAGACTAGAGACGCTTGATTGT	<i>OsBadh2</i> gene guideRNA
BAD2SgR		AAACACAATCAAGCGTCTCTAGTC	
Hyg-F		AGAAGAAGATGTTGGCGACCT	Hygromycin marker primer
Hyg-R		GTCCTGCGGGTAAATAGCT	
Vec-seq F	PHUN4c12	GCCCATTACGCAATTGGACG	To confirm oligos insertion in pHUN4c12 RTqPCR primers
Vec-seq R		CAAGGACGACGGCAACTACA	
<i>OsBadh1F</i>	LOC_Os04g39020	CCACGGAGGCAACCATC	
<i>OsBadh1R</i>		CCTTGAGGTACTTGGCCC	
<i>OsBadh2F</i>	LOC_Os08g32870	CTTGTTTGGAGCTTGCTGATG	
<i>OsBadh2R</i>		CATAACTCCCAGTAAATGCAACC	
<i>OsP5CS1F</i>	LOC_Os05g38150	CAAGATGGAAGATTGGCTTTGG	
<i>OsP5CS1R</i>		GTACCTAAGTCGCTGTCTGC	
<i>OsP5CS2F</i>	LOC_Os01g62900	TGCTGTTGGTGTGGGAG	
<i>OsP5CS2R</i>		AACGTGTCATAGATCGCCATC	
<i>OsGAD1F</i>	LOC_Os08g36320	CTGATGCTGGACGGGAAC	
<i>OsGAD1R</i>		TCCATGTCGACGTAGTTCTTG	
<i>OsGAD2F</i>	LOC_Os04g37500	ACAAGAACTACGCCGACATG	
<i>OsGAD2R</i>		CATTGAACAGCCTCGCTATG	
<i>OsGAD3F</i>	LOC_Os03g13300	CGTCTCCGAGAGTGACATG	
<i>OsGAD3R</i>		TTGCCGTCCAGCATCAG	
<i>OsGAD4F</i>	LOC_Os03g51080	CACTCCACGTTCGCCTC	
<i>OsGAD4R</i>		TTGCCGTCCAGCATCAG	
<i>OsNAC3F</i>	LOC_Os07g12340	GAAGAACGAGTGGGAGAAGATG	
<i>OsNAC3R</i>		GCGAGCATGGAGAGGTC	
<i>OsMYB30F</i>	LOC_Os02g41510	GTGGATCAACTACCTCCGC	
<i>OsMYB30R</i>		TTCTTGATCTCGTTGTCCGTC	
<i>OsDREB1CF</i>	LOC_Os06g03670	CAAGTTCAGGGAGACGAGG	
<i>OsDREB1CR</i>		AGATGCGGGACTTCTTGTTG	
<i>OsERF068F</i>	LOC_Os01g21120	TCATCTACGACTACATCCCGG	
<i>OsERF068R</i>		GTTCTTCCGCTCCCTCTTC	
<i>OsHAK5F</i>	LOC_Os01g70490	CCAAAGCCATACAGCCAAG	
<i>OsHAK5R</i>		TCCTTGATCCCGTTGGTAAAG	
<i>ActinF</i>	LOC_Os08g28190	CGTGAATACCAGCTAGGACTTG	
<i>ActinR</i>		TCAGGAGCTTGAAACCGTTC	