

Supplementary Material

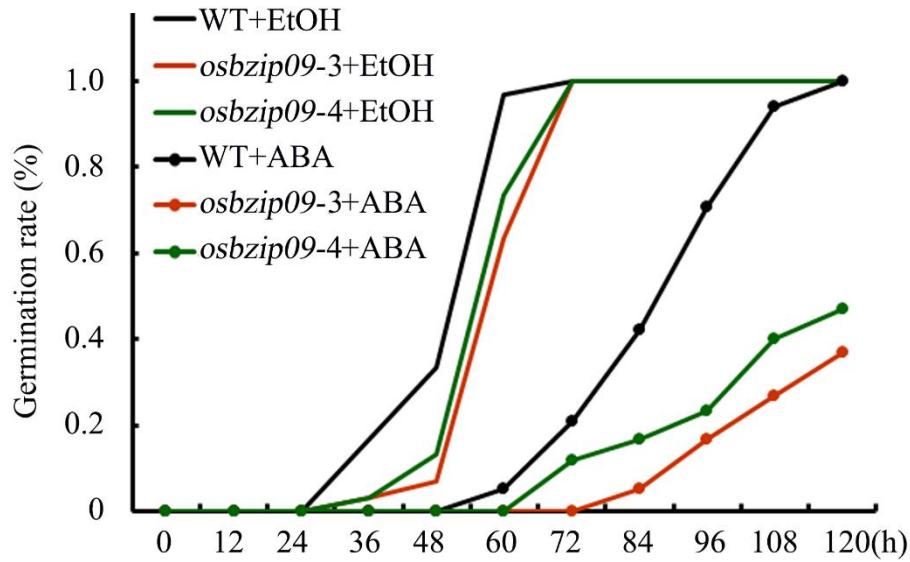


Figure S1. Time-course analysis of seed germination of *osbzip09* mutants (*osbzip09-3* and *osbzip09-4*) under normal conditions.

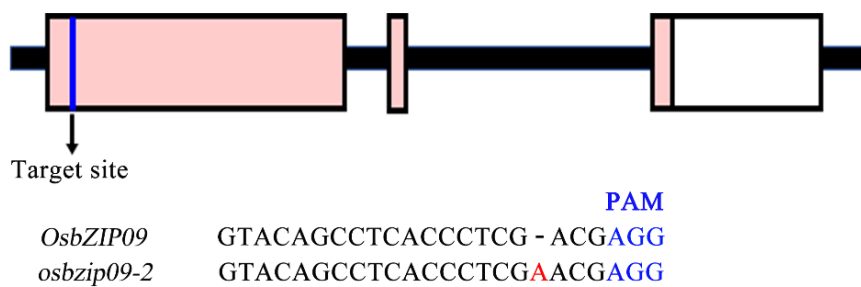


Figure S2. Schematic diagram of the CRISPR/Cas9 target site in *Os*bZIP09 and the basis of the mutation in *osbzip09-2*. The protospacer adjacent motif (PAM) is highlighted in blue.

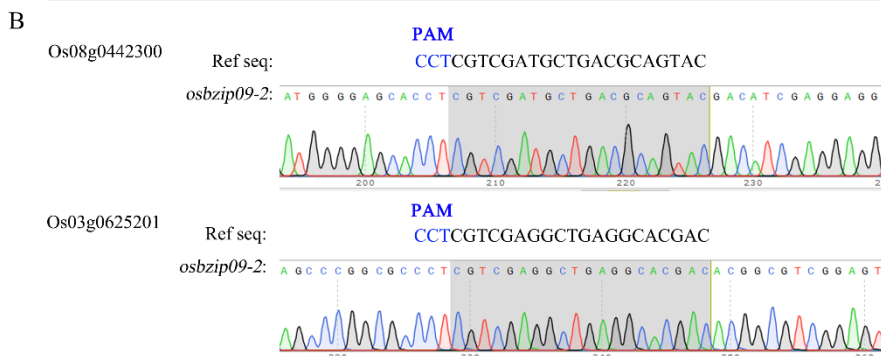
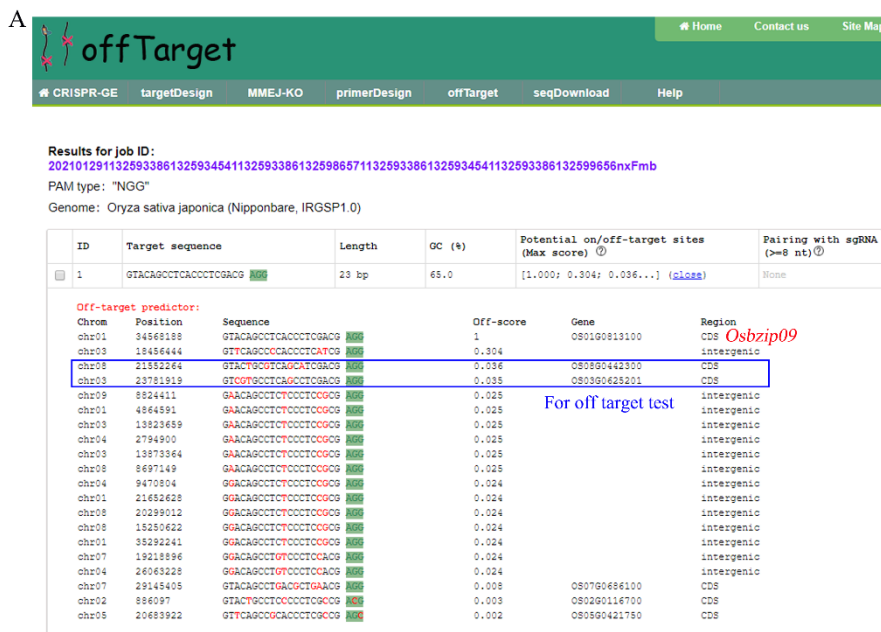


Figure S3. Off target analysis of *osbzip09-2* mutant. (A) Off target analysis of *OsZIP09* target sequence for CRISPR/Cas9 mediated gene editing using CRISPR-GE (<http://skl.scau.edu.cn/home/>). (B) Sequencing result of two candidate genes with the highest off-scores indicated that there was no off target mutation in *osbzip09-2* mutant.

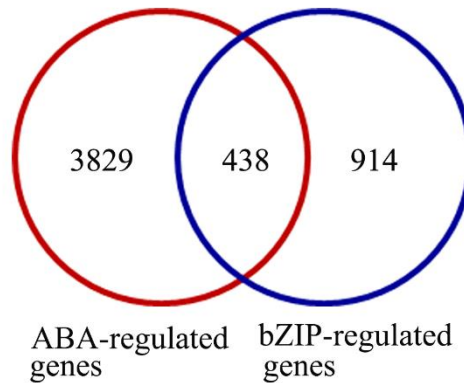


Figure S6. Venn diagram showing the overlap between genes responsive to ABA and mutation of *OsZIP09*.

Table S1 Oligonucleotide primer sequences used in this study

Primer Names	Sequence (5' → 3')	Usage
OsZIP09-SG-seq	GTACAGCCTCACCCCTCGACG	SG sequence for editing <i>OsZIP09</i>
OsZIP09seq-F	ATCTCGTCTCGATCATGGGG	Primers for sequencing and confirming mutation of <i>OsZIP09</i>
OsZIP09seq-R	CCCCAGCTTTGACCAGGAAA	
bZIP09qRT-F	GAGGCATGTCAGGGGATGTG	For qRT-PCR analysis of <i>OsZIP09</i>
bZIP09qRT-R	ACTTGGGTTCTGGTACAGGC	
LEA3qRT-F	TCACTTCAAATTCGGTGCAA	For qRT-PCR analysis of <i>LEA3</i>
LEA3qRT-R	CACACCCGTCAGAAATCCTC	
LEA4qRT-F	CAGCACAGGCTCCATAAGCA	For qRT-PCR analysis of <i>LEA4</i>
LEA4qRT-R	CAGCACAGAGACATGCGT	
LEA18qRT-F	TCCCATCCATGTCCAGGTTGA	For qRT-PCR analysis of <i>LEA18</i>
LEA18qRT-R	ACGGCCTCGGATGATGAAGC	
LEA25qRT-F	AGCTGGTGGACTAGGAACCG	For qRT-PCR analysis of <i>LEA25</i>
LEA25qRT-R	ATGGTGTCCGGTGTGTGG	
PP2C51RT-F	TGACGAGTTGGAACGAGTGG	For qRT-PCR analysis of <i>PP2C51</i>
PP2C51RT-R	CTCGCCAGGATCAGGAACTC	
USPqRT-F	GTCCGTGGTGCTGAAGATGT	For qRT-PCR analysis of <i>USP</i>
USPqRT-R	GCGACTACTTTGCCTTGACG	
LOX2qRT-F	AAGAACGCCCTCGACATCAA	For qRT-PCR analysis of <i>LOX2</i>
LOX2qRT-R	CGAACTTGGACTCTCCCGTC	
CSLA5qRT-F	CACCGCCCGGAGAAACAA	For qRT-PCR analysis of <i>CSLA5</i>

CSLA5qRT-R	CACCACCAGCATCACCGACAT	
Actin1qRT-F	CCAAGGCCAATCGTGAGAAGA	Reference gene for qRT-PCR assay
Actin1qRT-R	AATCAGTGAGATCACGCCAG	
pZIP09-EcoRI-F	CGGAATTCATGGCGTCTGAAGGCCGGAG	For construction of <i>OsbZIP09-62-SK</i>
pZIP09-KpnI-R	GGGGTACCTCAGAAATCTGCGGAGCTTG	
proLEA25KpnI-F	GGGGTACCTCCTTGCTTTTCTCGTTTGA	For construction of
proLEA25BamH-R	CGGGATCCTGTGGTGGGTGAAGCGAGGA	<i>LEA25pro-pGreenII</i>
proLOX2KpnI-F	GGGGTACCAGCACGTTTTTCAACGCCC	For construction of
proLOX2NcoI-R	CATGCCATGGTCTCTCACTAACCAACCAATGCT	<i>LOX2pro-pGreenII</i>
DAPseq Adapter A	CACGACGCTCTTCCGATCT	For DAP-seq sampling
DAPseq Adapter B	GATCGGAAGAGCACACGTCTG	
