



**Figure S1** Overexpression of OsRBCS4 in rice validated by qRT-PCR. (A) Expression levels of the OsRBCS4 gene in three overexpression lines were measured by quantitative real-time polymerase chain reaction (qRT-PCR). Each bar represents the mean standard deviation (SD) (n = 3). Asterisks indicate significant differences analyzed by Student's t-test (\*P < 0.05, \*\*P < 0.01, \*\*\*P < 0.0001).

### Supplemental Table 1

List of primers used in the study.

Primer	Sequence (5'--3')	Described
Cluc-OsRBCS4-KpnI-F	tacgcgtcccggggcgtaccATGGCTCCCTCGGTGATGG	For LUI assay
Cluc-OsRBCS4-SalI-R	acgaaagctctgcaggtcgacTTAGTTGCCGCTGACTCCTC	
pMAL-OsRBCS4-EcoRI-F	gagggaaggatttcagaattcATGGCTCCCTCGGTGATGG	For Pull-down assay
pMAL-OsRBCS4-XbaI-R	tgctgcaggtcgactctagaTTAGTTGCCGCTGACTCCTC	
PVX-OsRBCS4-HA-ClaI-F	tcagcaccagctagcatcgatATGGCTCCCTCGGTGATGG	For Co-IP assay
PVX-OsRBCS4-HA-SmaI-R	aatctctagaggatccccgggGTTGCCGCTGACTCCTCG	
AvrPikD-GFP-Tob-F	aacgatactcgaggggatccATGGAAACGGGCAACAAATATATA	
AvrPikD-GFP-Tob-R	gggaaattcgtagtgatccTCAAAGATCTACCATGTACAGCTCG	
RFP-AvrPik-D-F	aagggatccccgggtgagctcATGGAAACGGGCAACAAATATATA	For transient expression
RFP-AvrPik-D-R	agcgccgcactagtaagcttTAAAAGCCGGGCCTTTTTT	

223-OsRBCS4-SacIF	gtgggatccccgggtgagctcATGGCTCCCTCGGTGATGG	of rice protoplasts assay
223-OsRBCS4-NotIR	cccttgctcaccatagcgccgcGTTGCCGCCTGACTCCTCG	
OE-RBCS4-F	CGggatccATGGCTCCCTCGGTGATGG	OsRBCS4 overexpression in transgenic rice
OE-RBCS4-R	GGgtaccTTAGTTGCCGCCTGACTCC	
BD- <i>AvrPik-D</i> -F	tcagaggaggacctgcatatgATGGAAACGGGCAACAAATAT ATA	Construct vector for Y2H assay
BD- <i>AvrPik-D</i> -R	gcaggtcgacggatccccgggTAAAAGCCGGGCCTTTTTT	
AD-RBCS4-F	gtaccagattacgctcatatgATGGCTCCCTCGGTGATGG	
AD-RBCS4-R	ccgtatcgatgccacccgggTTAGTTGCCGCCTGACTCCTC	
OsUG_F	TTCTGGTCCTTCCACTTTCAG	qRT-PCR of rice genomic ubiquitin
OsUG_R	ACGATTGATTTAACCAGTCCATGA	
MoPot2-F	ACGACCCGTCTTTACTTATTTGG	qRT-PCR of <i>M.oryzae</i> retrotransposon Pot2
MoPot2-R	AAGTAGCGTTGTTTTGTTGGAT	
QRT-OsRbcS4 F1	GCAATGGCGGAAGGATCAGA	qRT-PCR
QRT-OsRbcS4 R1	GGAGCGCGAGAGAAACAATTACG	qRT-PCR
OsACTIN1-QRT-F	TGTATGCCAGTGGTCGTACCA	qRT-PCR
OsACTIN1-QRT-R	CCAGCAAGGTCGAGACGAA	qRT-PCR
OsPBZ1-QF	GGTGTGGGAAGCACATAC	qRT-PCR
OsPBZ1-QR	GTCTCCGTCGAGTGTGACTTG	qRT-PCR
OsPR1b-QF	CCCCTCCCAAGCTCAAACTCC	qRT-PCR
OsPR1b-QR	TGCCCCGACACCTTCCCC	qRT-PCR
OsPAL6-QF	GCTCTTCCGCACACACAACCTC	RT-PCR
OsPAL6-QR	TTGCTCGAGCGGTTTGC	RT-PCR