

Supplementary Table S1. Nomenclature for Two-component elements of rice^a

Gene Symbol	Synonyms	TIGR locus ID	RAP Locus	Features
<u>Rice cytokinin receptors</u>				
OsHK3 ^b	Crl2 ^c , Ohk2 ^d	LOC_Os01g69920	Os01g0923700	CHASE, HK, Rec
OsHK4 ^b	Crl1b ^c , Ohk4 ^d	LOC_Os03g50860	Os03g0717700	CHASE, HK, Rec
OsHK5 ^b	Crl3 ^c , Ohk3 ^d , OsHK2 ^e	LOC_Os10g21810	Os10g0362300	CHASE, HK, Rec
OsHK6 ^b	Crl1a ^c , Ohk5 ^d , OsHK1 ^e	LOC_Os02g50480	Os02g0738400, Os02g0738500	CHASE, HK, Rec
OsCRL4 ^e	OsHKL1 ^e	LOC_Os12g26940	Os12g0454800	CHASE
<u>Rice Histidine phosphotransfer protein gene family</u>				
OsAHP1 ^a	Hpt2 ^b , Ohp1 ^d , OsHP2 ^e	LOC_Os08g44350	Os08g0557700	HPT
OsAHP2 ^a	Hpt3 ^b , Ohp2 ^d , OsHP1 ^e	LOC_Os09g39400	Os09g0567400	HPT
OsPHP1 ^a	Hpt1 ^b , OsHP3 ^e	LOC_Os01g54050	Os01g0743800	Pseudo-HPT
OsPHP2 ^a	Hpt4 ^b , OsHP5 ^e	LOC_Os05g09410	Os05g0186100	Pseudo-HPT
OsPHP3 ^a	Hpt5 ^b , OsHP4 ^e	LOC_Os05g44570	Os05g0521300	Pseudo-HPT
<u>Rice type-A response regulators</u>				
OsRR1 ^f	Rra9 ^b	LOC_Os04g36070	Os04g0442300	Rec
OsRR2 ^f	Rra10 ^b	LOC_Os02g35180	Os02g0557800	Rec
OsRR3 ^f	Rra7 ^b	LOC_Os02g58350	Os02g0830200	Rec
OsRR4 ^f	Rra3 ^b	LOC_Os01g72330	Os01g0952500	Rec
OsRR5 ^f	Rra4 ^b	LOC_Os04g44280	Os04g0524300	Rec
OsRR6 ^f	Rra6 ^b	LOC_Os04g57720	Os04g0673300	Rec
OsRR7 ^f	Rra5 ^b	LOC_Os07g26720	Os07g0449700	Rec
OsRR8 ^f	Rra13 ^b , OsRR15 ^e	LOC_Os08g28900	Os08g0376700	Rec
OsRR9 ^f	Rra1 ^b	LOC_Os11g04720	Os11g0143300	Rec
OsRR10 ^f	Rra2 ^b	LOC_Os12g04500	Os12g0139400	Rec
OsRR11 ^d	Rra8 ^b	LOC_Os02g42060	Os02g0631700	Rec
OsRR12 ^d	Rra11 ^b , OsRR8 ^e	LOC_Os08g28950	Os08g0377200	Rec
OsRR13 ^d	Rra12 ^b , OsRR12 ^e	LOC_Os08g26990	Os08g0358800	Rec
<u>Rice type-B response regulators</u>				
OsRR21 ^a	Rrb1 ^b , Orr1 ^d , OsRR19 ^e	LOC_Os03g12350	Os03g0224200	Rec, Myb
OsRR22 ^a	Rrb4 ^b , Orr2 ^d , OsRR20 ^e	LOC_Os06g08440	Os06g0183100	Rec, Myb
OsRR23 ^a	Rrb5 ^b , Orr3 ^d , OsRR18 ^e	LOC_Os02g55320	Os02g0796500	Rec, Myb
OsRR24 ^a	Rrb2 ^b , Orr4 ^d , OsRR17 ^e	LOC_Os02g08500	Os02g0182100	Rec, Myb
OsRR25 ^a	Rrb3 ^b , Orr5 ^d , OsRR21 ^e	LOC_Os06g43910	Os06g0647200	Rec, Myb
OsRR26 ^a	Rrb6 ^b , Orr6 ^d , OsRR16 ^e	LOC_Os01g67770	Os01g0904700	Rec, Myb
OsRR27 ^a	Rra16 ^b , OsPRR5 ^e	LOC_Os05g32880	Os05g0395600	Rec, Myb
OsRR28 ^a	Rra22 ^b , OsPRR3 ^e	LOC_Os04g28160	Os04g0349100	Rec, Myb
OsRR29 ^a	Rrb7 ^b , OsPRR4 ^e	LOC_Os04g28130	Os04g0348800	Rec, Myb
OsRR30 ^a	Ehd1 ^g , OsRR22 ^e	LOC_Os10g32600	Os10g0463400	Rec, Myb
OsRR31 ^a		LOC_Os08g35650	Os08g0458400	Rec, Myb
OsRR32 ^a		LOC_Os08g17760	Os08g0279900	Rec, Myb
OsRR33 ^a	Rra19 ^b	LOC_Os08g35670	Os08g0458600	Rec, Myb
<u>Rice type-C response regulators</u>				
OsRR41 ^a	Rra14 ^b , OsRR14 ^e	LOC_Os03g53100	Os03g0742300	Rec
OsRR42 ^a	Rra15 ^b , OsRR13 ^e	LOC_Os04g13480	Os04g0212450	Rec
<u>Rice pseudo-response regulators</u>				
OsPRR1 ^h		LOC_Os02g40510	Os02g0618200	Rec(D-E), CCT
OsPRR37 ^h	Prr4 ^b	LOC_Os07g49460	Os07g0695100	Rec(D-E), CCT
OsPRR73 ^h	Prr3 ^b	LOC_Os03g17570	Os03g0284100	Rec(D-E), CCT
OsPRR59 ^h	Prr5 ^b	LOC_Os11g05930	Os11g0157600	Rec(D-E), CCT
OsPRR95 ^h	Prr2 ^b	LOC_Os09g36220	Os09g0532400	Rec(D-E), CCT
OsPRR10 ^a	Rra18 ^b	LOC_Os05g32890	Os05g0395700	Rec(D-E), Myb
OsPRR11 ^a		LOC_Os04g28150	Os04g0349000	Rec(D-E)
OsPRR12 ^a	Rra17 ^b	LOC_Os04g28120	Os04g0348600	Rec(D-A)

^aAdapt from Schaller et al. (2007). ^bPareek et al. (2006). ^cHan et al. (2004). ^dIto and Kurata (2006). ^eDu et al. (2007). ^fJain et al. (2006). ^gDoi et al. (2004). ^hMurakami et al. (2003). CHASE domain for cytokinin binding (CHASE). His-kinase domain (HK). Receiver domain (Rec). His-containing phosphotransfer domain (HPT). Myb-like DNA-binding domain (Myb), CCT motif found in clock proteins (CCT).

Supplementary Table S5. Primers used in this study

Primer Name	Primer Sequence (5'→3')
OsAHP1 pBS-YFP cloning F'	ATACACATTTAATCATTCCCTATAACCAAGGGCTC
OsAHP1 pBS-YFP cloning R'	AGTTGAATGTTTAGGGTAACAAGCT
OsAHP2 pBS-YFP cloning F'	GGAAAGCGAGAGGGAATAATGTAAG
OsAHP2 pBS-YFP cloning R'	TTGCTGCTTGGGATCATAAGC
OsPHP1 pBS-YFP cloning F'	GTTCTATCTTTCCCTCCTTGCTCTGG
OsPHP1 pBS-YFP cloning R'	CGGTTCTGACATGACAGGC
OsRR4 pBS-YFP cloning F'	ATTGCCATCCACCAAAGCCA
OsRR4 pBS-YFP cloning R'	GTTTGATAAGGTCTCCACTGCAAG
OsRR5 pBS-YFP cloning F'	ACGGTCACACACAGAATTCCTAAAGC
OsRR5 pBS-YFP cloning R'	CACGGCTAACCGGAGGACG
OsRR10 pBS-YFP cloning F'	GTAAAGCAAAGCCTTTCATGCCA
OsRR10 pBS-YFP cloning R'	ACTATGCCTTGGTCTTATTGTGTG
OsRR22 pBS-YFP cloning F'	CATCAGTCCACTCATCCCCATGC
OsRR22 pBS-YFP cloning R'	TGATATGCAGGCACCAAGTGAA
OsRR23 pBS-YFP cloning F'	TAGTACATACTACAGACTACAGAGGGATG
OsRR23 pBS-YFP cloning R'	TATGCAAGCTCCAAGGGAGTAG
OsRR29 pBS-YFP cloning F'	ACAAAGAACATAACTAGCGGAATGC
OsRR29 pBS-YFP cloning R'	ATCGCTATCGGATTCTGAATAATCC
OsRR33 pBS-YFP cloning F'	AATCACTCAAAAACACTCATCAATGAAATCTG
OsRR33 pBS-YFP cloning R'	TGAGATGACTACTGAATACTCGCT
OsRR22 pEarleyGate203 cloning F'	ATGCTTCTGGGTGCTTTGAGGATG
OsRR22 pEarleyGate203 cloning R'	TCATATGCAGGCACCAAGTGGA
OsRR29 pEarleyGate203 cloning F'	ATGGCCCAAAAAGGAAGGACTC
OsRR29 pEarleyGate203 cloning R'	GCCTCTGTCTAATCGCTATCGGA
OsRR33 pEarleyGate203 cloning F'	ATGGATCAAGCGAGGATCTCGTTC
OsRR33 pEarleyGate203 cloning R'	TGCGATGAGATGACTACTGACTACTC
OsActin RT F'	TCAGCAACTGGGATGATATGGAG
OsActin RT R'	GCCGTTGTGGTGAATGAGTAAC
OsRR22 RT F'	TGCCAATAACCATGTAACATCAACCAAC
OsRR22 RT R'	GGTTTTAGAAAGATAGTCACAGGCACC
OsRR29 RT F'	TGCTGCTCATCTGCAGAAAACATCG
OsRR29 RT R'	TAGGTTGAGTGTGGAAACGAGGCT
OsRR33 RT F'	TACCTTCTGTGCGAAGATGGAGGAGGA
OsRR33 RT R'	CAGCGACATTGGCCTGAATCCTTT
OsHP2 qRT-PCR F	GTTTGGTGGACGAGCAGTTC
OsHP2 qRT-PCR R	CTGCTGCCTTTGAGCTGATG
OsRR1 qRT-PCR F	AGGATCAGCAGATGCATGAATG
OsRR1 qRT-PCR R	GAGACGCTGTACGTCCTTGCTT
OsRR7 qRT-PCR F	TGCTCAAGAAGATCAAGGAATCG
OsRR7 qRT-PCR R	GGCACGTTCTCTGACGACATTAT
OsRR9/10 qRT-PCR F	TCATGAGGACAGCCCAATTTCTA
OsRR9/10 qRT-PCR R	TGCAGTAGTCTGTGATGATCAGGTT
Actin qRT-PCR F	TGTATGCCAGTGGTTCGTACCA
Actin qRT-PCR R	CCAGCAAGGTCGAGACGAA
OsRR2 cloning F	TCATGTCTGTCGGAGAATGAG
OsRR2 cloning R	CGAGCAGGATGAGCTTGAA
OsRR3 cloning F	ACGGTGGATAGTGGCAAGAG
OsRR3 cloning R	AAGTCTTCAGCCCCCTCCT