10.1071/FP16314_AC

Supplementary Material: *Functional Plant Biology*, 2017, 44(6), 635–645.

Supplementary Material

Endosperm-specific OsPYL8 and OsPYL9 act as positive regulators of the ABA signaling pathway in rice seed germination

Ziqiang Chen[A], *Lan Kong*[A], *Yun Zhou*[A], *Zaijie Chen*[A], *Dagang Tian*[A], *Yan Lin*[A], *Feng Wang*[A] *and Songbiao Chen*[A,B]

[A]Biotechnology Research Institute, Fujian Academy of Agricultural Sciences, Fuzhou 350003, China.

[B]Corresponding author. Emails: songbiao_chen@hotmail.com; sbchen@fjage.org

Table S1. Primers used in this study

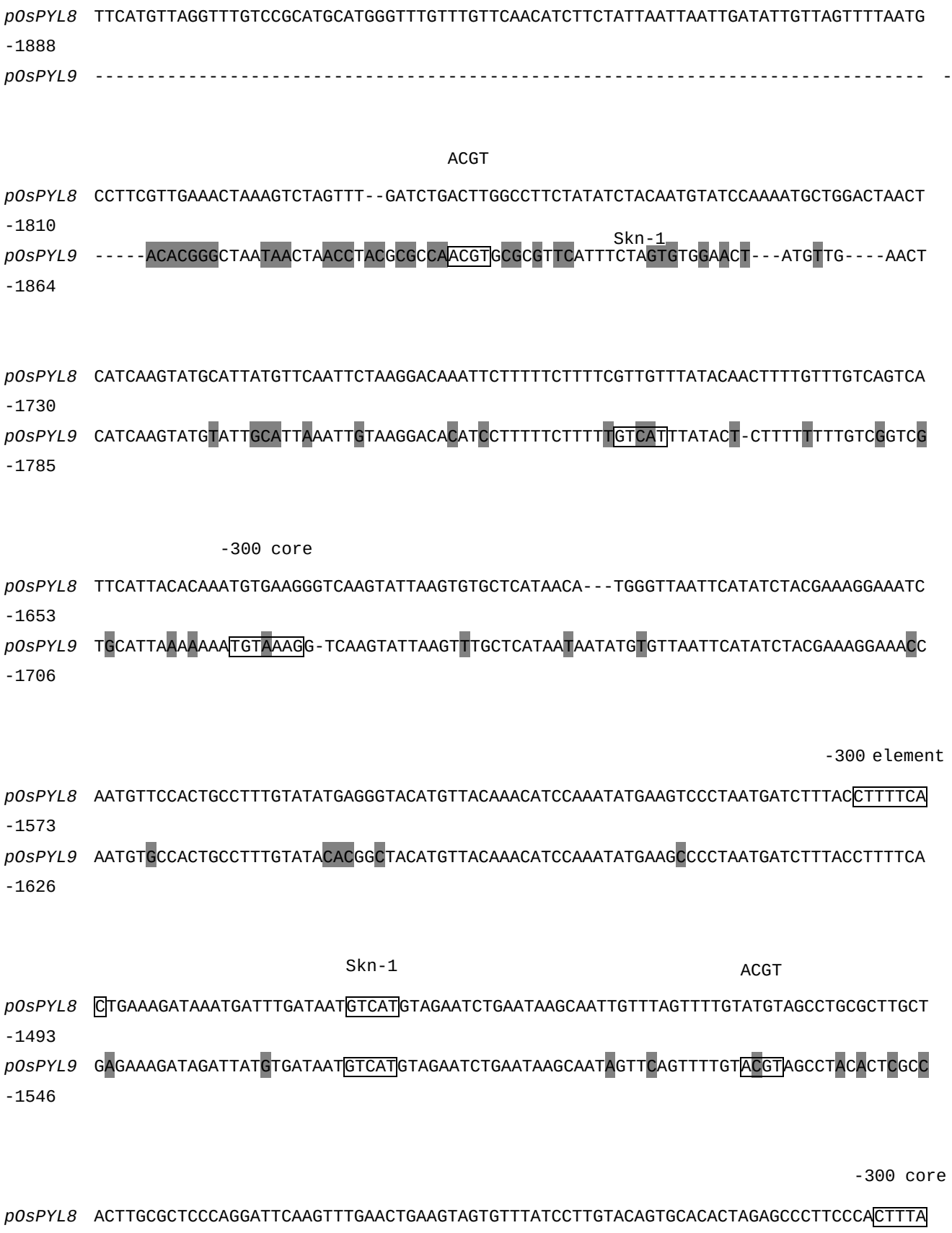
Primers	Sequence: 5′-3′	Comments
OsPYL1-qPCR-F	ACTGCCCCCAGGTGTACAAG	Forward primer for qRT-PCR analysis of *OsPYL1*
OsPYL1-qPCR-R	ATGGTGAAGCCGAAGACGC	Reverse primer for qRT-PCR analysis of *OsPYL1*
OsPYL2/3-qPCR-F	GCAGCGGTACAAGCACTTC	Forward primer for qRT-PCR analysis of *OsPYL2/3*
OsPYL2/3-qPCR-R	GAGGTGACGGAGCGGTAGTT	Reverse primer for qRT-PCR analysis of *OsPYL2/3*
OsPYL4-qPCR-F	CGTGTTCGTGGACACGATC	Forward primer for qRT-PCR analysis of *OsPYL4*
OsPYL4-qPCR-R	TGGTGGTCGAGTCGTACGT	Reverse primer for qRT-PCR analysis of *OsPYL4*
OsPYL5-qPCR-F	TCGTCGTGGAGTCCTACGT	Forward primer for qRT-PCR analysis of *OsPYL5*
OsPYL5-qPCR-R	GAGGGAGAGCTAGCTATGATC	Reverse primer for qRT-PCR analysis of *OsPYL5*
OsPYL6-qPCR-F	AGAACTACCTCTCGGTCACC	Forward primer for qRT-PCR analysis of *OsPYL6*
OsPYL6-qPCR-R	TCTTGGCGAGAGACTGGAG	Reverse primer for qRT-PCR analysis of *OsPYL6*
OsPYL8/9-qPCR-F	CGGGAGGAAGAGATGGAGTA	Forward primer for qRT-PCR analysis of *OsPYL8/9*
OsPYL8/9-qPCR-R	GGCTGATCAAACCTCCTCAC	Reverse primer for qRT-PCR analysis of *OsPYL8/9*
OsPYL10-qPCR-F	TACTCCTCCATCCTGACCGT	Forward primer for qRT-PCR analysis of *OsPYL10*
OsPYL10-qPCR-R	GCGTTCAGAAACCTCTGCAAG	Reverse primer for qRT-PCR analysis of *OsPYL10*
OsPYL11-qPCR-F	ACCGCCTCAGGAACTACTCA	Forward primer for qRT-PCR analysis of *OsPYL11*
OsPYL11-qPCR-R	CGGCGAGAGATGTTAAGTTGC	Reverse primer for qRT-PCR analysis of *OsPYL11*
OsPYL12-qPCR-F	CCTGGGAAGTATGTGAGTGC	Forward primer for qRT-PCR analysis of *OsPYL12*
OsPYL12-qPCR-R	GATGGCGTTGCAAATAAGAC	Reverse primer for qRT-PCR analysis of *OsPYL12*

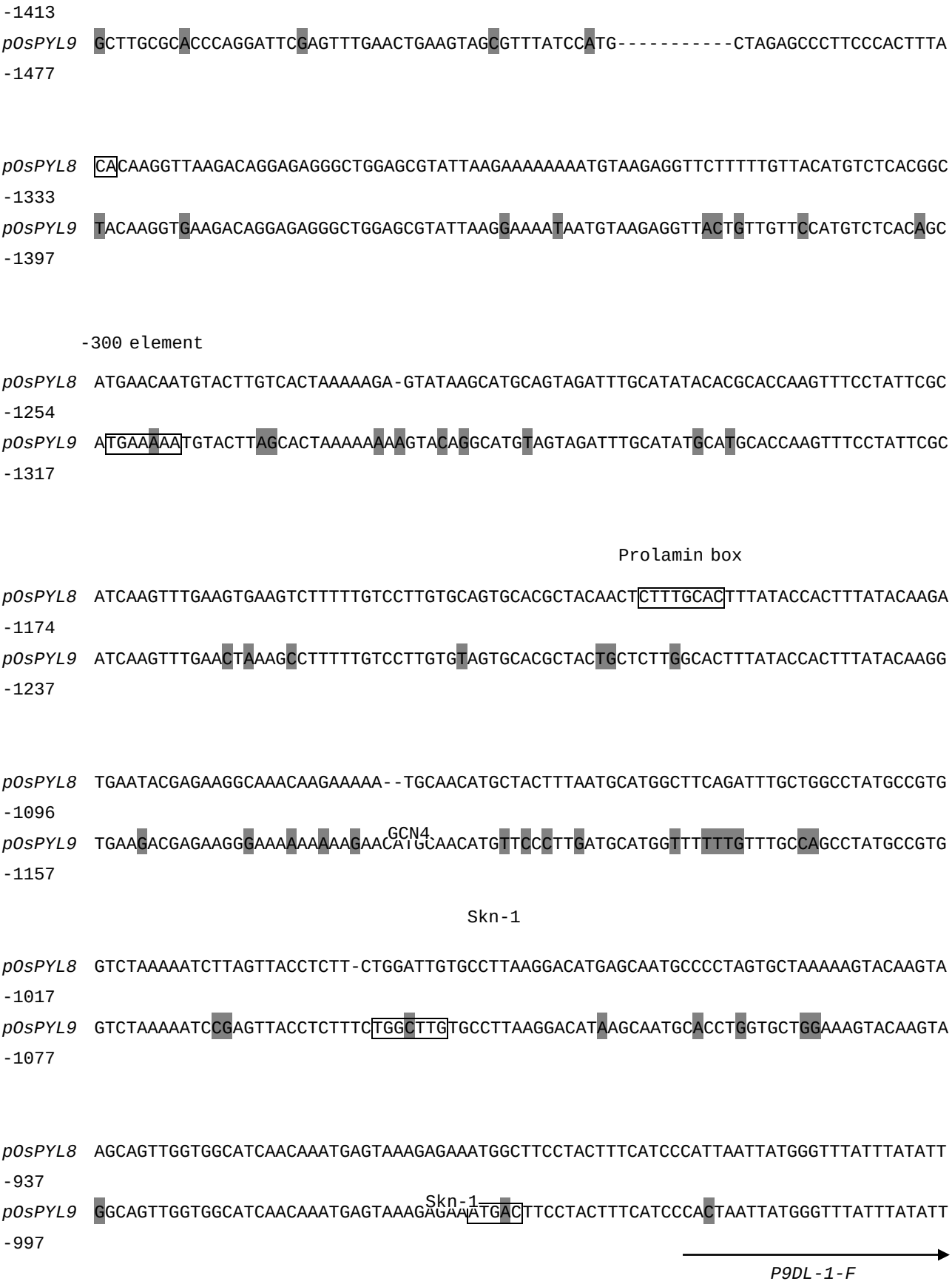
Ubi-qPCR-F	CAGCAGCGGCTCATCTT	Forward primer for qRT-PCR analysis of internal control *ubiquitin* gene
Ubi-qPCR-R	GCTTCTTGGGCTTGGTGTA	Reverse primer for qRT-PCR analysis of internal control *ubiquitin* gene
Ubi-RT-F	CCTCGGACACCATCGACAACGTG	Forward primer for semi-quantitative RT-PCR analysis of internal control *ubiquitin* gene
Ubi-RT-R	CGCCCCCAAAGAACAGGAGCCTA	Reverse primer for semi-quantitative RT-PCR analysis of internal control *ubiquitin* gene
OsPYL8/9-RT-F	AGGAGCAGCGGCAGGGAAGT	Forward primer for semi-quantitative RT-PCR analysis of *OsPYL8/9*
OsPYL8/9-RT-R	GAGTGGACGGTCAGGATGGATG	Reverse primer for semi-quantitative RT-PCR analysis of *OsPYL8/9*
pOsPYL8-F	TTCATGTTAGGTTTGTCCGCAT	Forward primer to amplify the 2053 bp promoter fragment of *OsPYL8*
pOsPYL8-R	CTCCGGTACACAGTAGCAGCAG	Reverse primer to amplify the 2053 bp promoter fragment of *OsPYL8*
pOsPYL9-F	ACACGGGCTAATAACTAACCTACG	Forward primer to amplify the 2045 bp promoter fragment of *OsPYL9*
pOsPYL9-R	TCTCCGATACACAGTAGCAGCAG	Reverse primer to amplify the 2045 bp promoter fragment of *OsPYL9*
P9DL-1-F	TATTGATTTAGAATGAATGGGTTGG	Forward primer to amplify the 5′-deletion *OsPYL9* promoter-1 (-941 to +113)
P9DL-2-F	TTTAATACCCATGTCCAACTATAGAA	Forward primer to amplify the 5′-deletion *OsPYL9* promoter-2 (-731 to +113)
P9DL-3-F	ACCATTATTAGTTTTGTAGACCAGAC	Forward primer to amplify the 5′-deletion *OsPYL9* promoter-3 (-433 to +113)
P9DL-4-F	AGAACCTAGTCGGCCCGCTGG	Forward primer to amplify the 5′-deletion *OsPYL9* promoter-4 (-211 to +113)
P9DL-5-F	GATTGCCGAAAGGGTTATGTTGCT	Forward primer to amplify the 5′-deletion *OsPYL9* promoter-5 (-59 to +113)
RACE-R	TATGCTTGGCGGCGAACGAGGTGC	Reverse primer for 5′-RACE to map transcriptional start sites of *OsPYL8/9*
OsPYL8-CDS-F	ATGAACGGCGCTGGTGGTGCG	Forward primer to clone CDS of *OsPYL8* into pCXUN
OsPYL9-CDS-F	ATGAACGGCGTTGGTGGGGCG	Forward primer to clone CDS of *OsPYL9* into pCXUN
OsPYL8/9-CDS-R	TCAAGGATTGGCAAGGCGCTCC	Reverse primer to clone CDS of *OsPYL8/9* into pCXUN
OsPP2C06-qPCR-F	GAAGAAGTGGGAACAGGCGT	Forward primer for qRT-PCR analysis of *OsPP2C06*

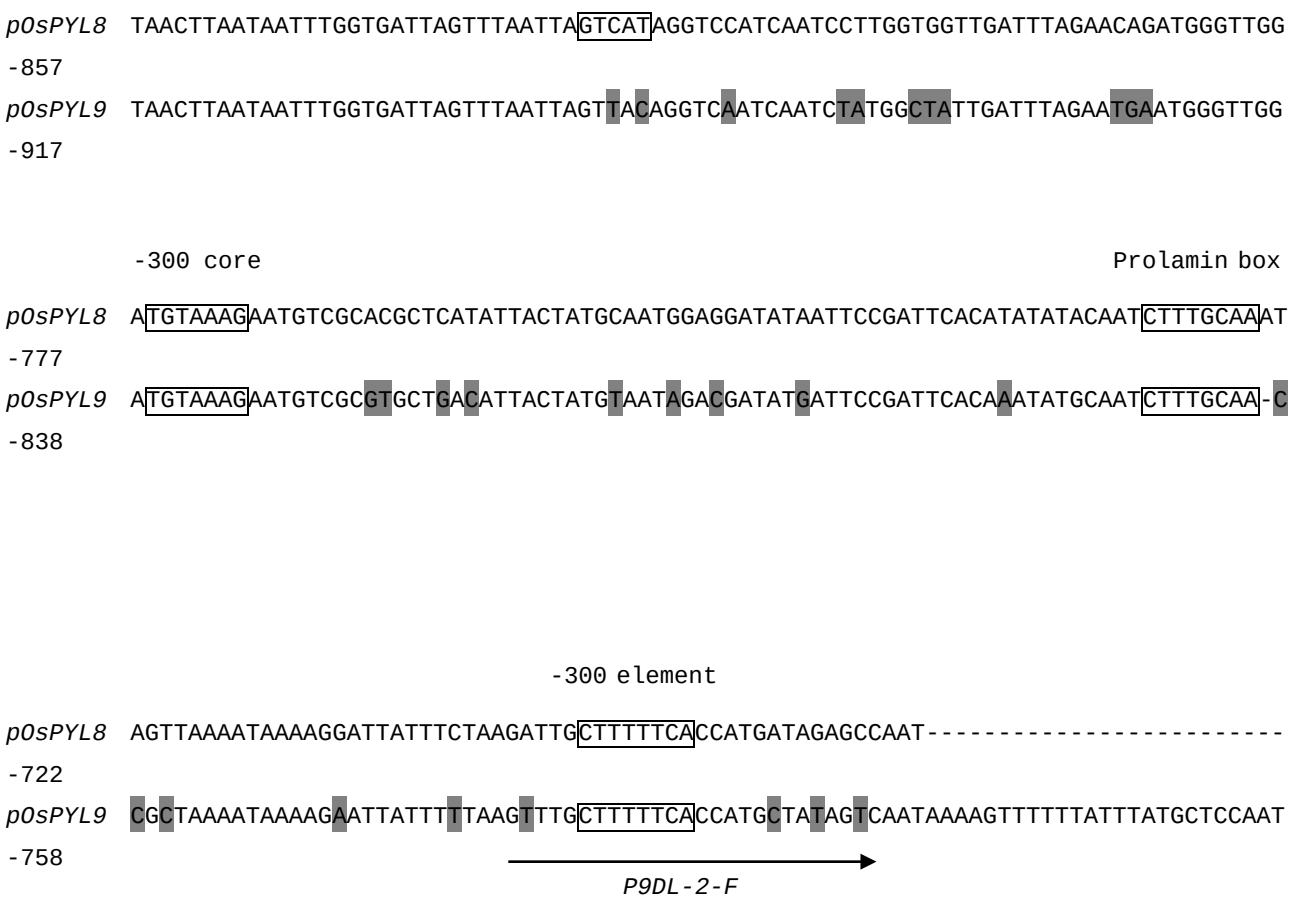
OsPP2C06-qPCR-R	TGCCCGTGAGTCTCCACAAT	Reverse primer for qRT-PCR analysis of *OsPP2C06*
OsPP2C08-qPCR-F	GATGTGGCCTGCAAGATTGC	Forward primer for qRT-PCR analysis of *OsPP2C08*
OsPP2C08-qPCR-R	TA CTCCTCAGCCGTCTCAAC	Reverse primer for qRT-PCR analysis of *OsPP2C08*
OsPP2C09-qPCR-F	TTCCATTTTTACGGCGTCTTCGACG	Forward primer for qRT-PCR analysis of *OsPP2C09*
OsPP2C09-qPCR-R	GCTCTTCTCCATCACATCCCTCCAA	Reverse primer for qRT-PCR analysis of *OsPP2C09*
OsPP2C30-qPCR-F	GCAAACCTCGGACAATGTCAG	Forward primer for qRT-PCR analysis of *OsPP2C30*
OsPP2C30-qPCR-R	GCTTTGAGGATGCCACATTCTG	Reverse primer for qRT-PCR analysis of *OsPP2C30*
OsPP2C49-qPCR-F	GATCCGCCATTATTATTGGCT	Forward primer for qRT-PCR analysis of *OsPP2C49*
OsPP2C49-qPCR-R	CCATCCACCAATCACACGAG	Reverse primer for qRT-PCR analysis of *OsPP2C49*
OsPP2C50-qPCR-F	TTGATCACAAGCCTGACAGGAAG	Forward primer for qRT-PCR analysis of *OsPP2C50*
OsPP2C50-qPCR-R	CGCTTGCTAGAATAAGACAGTCA	Reverse primer for qRT-PCR analysis of *OsPP2C50*
OsPP2C51-qPCR-F	AGTAGCTCCCTGTACATTACG	Forward primer for qRT-PCR analysis of *OsPP2C51*
OsPP2C51-qPCR-R	GAGAGTCCAACACATCCGA	Reverse primer for qRT-PCR analysis of *OsPP2C51*
OsPP2C53-qPCR-F	GCGATCAATCGGGGACAAATACC	Forward primer for qRT-PCR analysis of *OsPP2C53*
OsPP2C53-qPCR-R	TCTTGCGAGCAGCATCACAGACC	Reverse primer for qRT-PCR analysis of *OsPP2C53*
OsPP2C68-qPCR-F	AACGCCTTGTAGAGAGAGTG	Forward primer for qRT-PCR analysis of *OsPP2C068*
OsPP2C68-qPCR-R	TGTGCTCCACTGAACTTGGT	Reverse primer for qRT-PCR analysis of *OsPP2C068*
GFP-OsPYL8-F	AATGAACGGCGCTGGTGGTGC	Forward primer of *OsPYL8* gene to make *GFP-OsPYL8* for subcellular localization
GFP-OsPYL9-F	AATGAACGGCGTTGGTGGGGC	Forward primer of *OsPYL9* gene to make *GFP-OsPYL9* for subcellular localization
GFP-OsPYL8/9-R	GAGGATTGGCAAGGCGC	Reverse primer of *OsPYL8/9* gene to make *GFP-OsPYL8/9* for subcellular localization

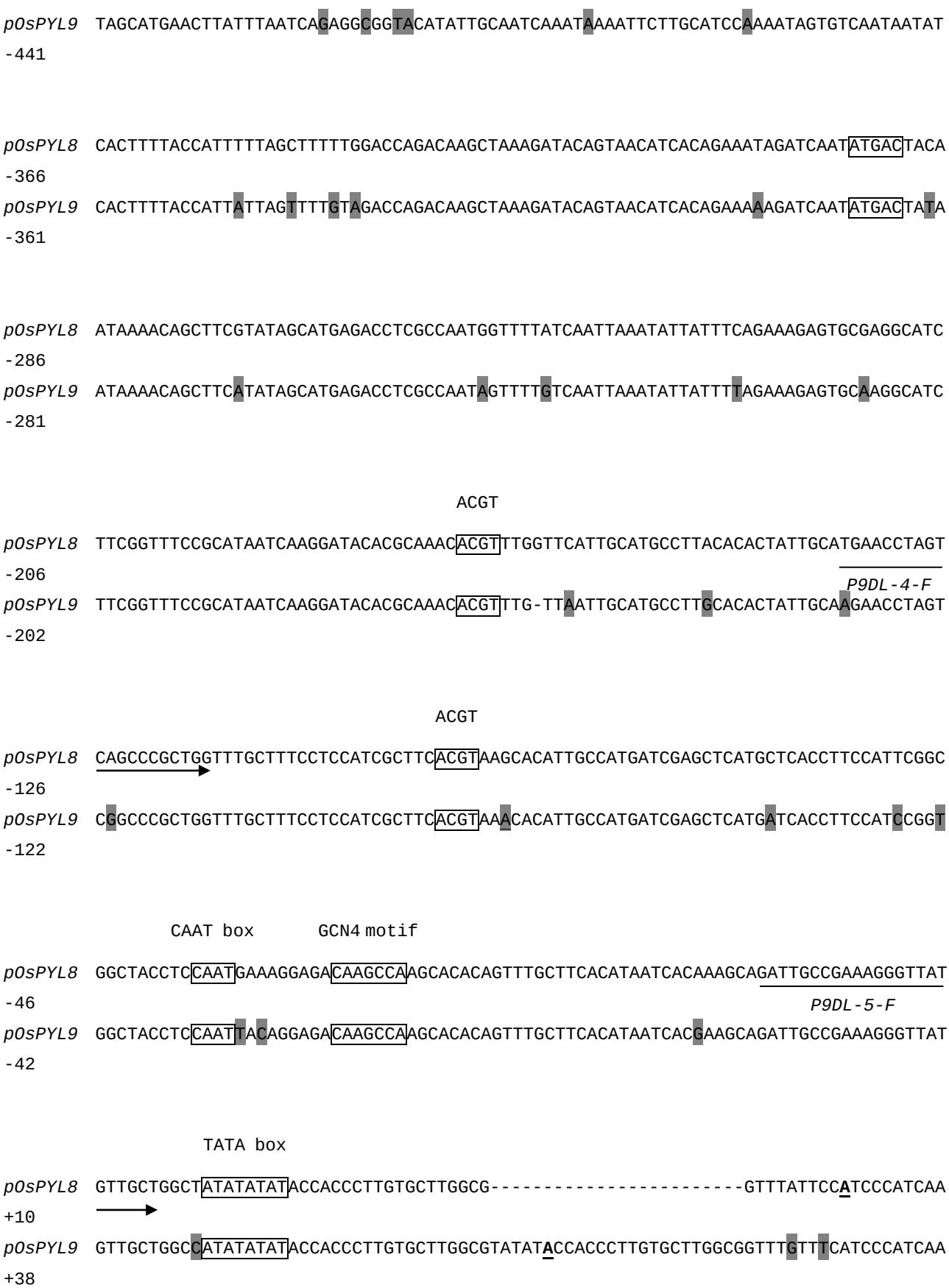
GFP-OsPP2C06-F	AATGGAGGACGTGGCGGTGG	Forward primer of *OsPP2C06* gene to make *GFP-OsPP2C06* for subcellular localization
GFP-OsPP2C06-R	GCTTGCAAGCAAAAATTAATTGC	Reverse primer of *OsPP2C06* gene to make *GFP-OsPP2C06* for subcellular localization
GFP-OsPP2C51-F	AATGAGGGAGACGGGCGCGAC	Forward primer of *OsPP2C51* gene to make *GFP-OsPP2C51* for subcellular localization
GFP-OsPP2C51-R	GAGCTGCCCTGCTCTTGAGCC	Reverse primer of *OsPP2C51* gene to make *GFP-OsPP2C51* for subcellular localization
GFP-OsPP2C68-F	AATGTCGATGGCGGAGGTGTGCTGT	Forward primer of *OsPP2C68* gene to make *GFP-OsPP2C68* for subcellular localization
GFP-OsPP2C68-R	GCAAGGCGTTGCCTCGCCGGA	Reverse primer of *OsPP2C68* gene to make *GFP-OsPP2C68* for subcellular localization
BK-OsPYL8-F	CATGGAGGCCGAATTCATGAACGGC GCTGGTGGTGCGGGA	Forward primer of *OsPYL8* gene to make pGBK-OsPYL8 for Y2H
BK-OsPYL9-F	CATGGAGGCCGAATTCATGAACGGC GTTGGTGGGGCGGGA	Forward primer of *OsPYL9* gene to make pGBK-OsPYL9 for Y2H
BK-OsPYL8/9-R	GCAGGTCGACGGATCCTCAAGGATT GGCAAGGCGCTCCTC	Reverse primer of *OsPYL8/9* gene to make PGBK-OsPYL8/9 for Y2H
AD-OsPP2C06-F	GGGAATTCCATATGATGGAGGACGTG GCGGTGGCGG	Forward primer of *OsPP2C06* gene to make pGAD-OsPP2C06 for Y2H
AD-OsPP2C06-R	CGAGCTCGATGGATCCTCACTTGCAA GCAAAAATTAATTG	Reverse primer of *OsPP2C06* gene to make pGAD-OsPP2C06 for Y2H
AD-OsPP2C51-F	GGAGGCCAGTGAATTCATGAGGGAG ACGGGCGCGA	Forward primer of *OsPP2C51* gene to make pGAD-OsPP2C51 for Y2H
AD-OsPP2C51-R	CGAGCTCGATGGATCCTCAAGCTGC CCTGCTCTTGAGC	Reverse primer of *OsPP2C51* gene to make pGAD-OsPP2C51 for Y2H
AD-OsPP2C68-F	GGAGGCCAGTGAATTCATGTCGATG GCGGAGGTGTGCTGT	Forward primer of *OsPP2C68* gene to make pGAD-OsPP2C68 for Y2H
AD-OsPP2C68-R	CGAGCTCGATGGATCCCTACAAGGC GTTGCCTCGCCGGAG	Reverse primer of *OsPP2C68* gene to make pGAD-OsPP2C68 for Y2H
NYFP-OsPYL8-F	CCGCTCGAGATGAACGGCGCTGGTG GTGC	Forward primer of *OsPYL8* gene to make pA7-NYFP-OsPYL8 for BiFC
NYFP-OsPYL9-F	CCGCTCGAGATGAACGGCGTTGGTG G	Forward primer of *OsPYL9* gene to make pA7-NYFP-OsPYL9 for BiFC
NYFP-OsPYL8/9-R	CGCGGATCCAGGATTGGCAAGGCGC TC	Reverse primer of *OsPYL8/9* gene to make pA7-NYFP-OsPYL8/9 for BiFC
CYFP-OsPP2C06-F	CCGCTCGAGATGGAGGACGTGGCGG TGGC	Forward primer of *OsPP2C06* gene to make pA7-CYFP-OsPP2C06 for BiFC
CYFP-OsPP2C06-R	CGCGGATCCCTTGCAAGCAAAAATT AATTG	Reverse primer of *OsPP2C06* gene to make pA7-CYFP-OsPP2C06 for BiFC

CYFP-OsPP2C51-F	CGCGGATCCATGAGGGAGACGGGCG CGAC	Forward primer of *OsPP2C51* gene to make pA7-CYFP-OsPP2C51 for BiFC
CYFP-OsPP2C51-R	GGACTAGTAGCTGCCCTGCTCTTGA GCC	Reverse primer of *OsPP2C51* gene to make pA7-CYFP-OsPP2C51 for BiFC
CYFP-OsPP2C68-F	CCGCTCGAGATGTCGATGGCGGAGG TGTGC	Forward primer of *OsPP2C68* gene to make pA7-CYFP-OsPP2C68 for BiFC
CYFP-OsPP2C68-R	CGCGGATCCCAAGGCGTTGCCTCGC CGGA	Reverse primer of *OsPP2C68* gene to make pA7-CYFP-OsPP2C68 for BiFC


pOsPYL8 TTCATGTTAGGTTTGTCCGCATGCATGGGTTTGTTTGTTCAACATCTTCTATTAATTAATTGATATTGTTAGTTTTAATG
-1888
pOsPYL9 ----------
-
ACGT
pOsPYL8 CCTTCGTTGAAACTAAAGTCTAGTTT--GATCTGACTTGGCCTTCTATATCTACAATGTATCCAAAATGCTGGACTAACT
-1810
Skn-1
pOsPYL9 -----ACACGGGCTAATAACTAACCTACGCGCCAACGTGCGCGTTCATTTCTAGTGTGGAACT---ATGTTG----AACT
-1864
pOsPYL8 CATCAAGTATGCATTATGTTCAATTCTAAGGACAAATTCTTTTTCTTTTCGTTGTTTATACAACTTTTGTTTGTCAGTCA
-1730
pOsPYL9 CATCAAGTATGTATTGCATTAAATTGTAAGGACACATCCTTTTTCTTTTTGTCATTTATACT-CTTTTTTTTGTCGGTCG
-1785
-300 core
pOsPYL8 TTCATTACACAAATGTGAAGGGTCAAGTATTAAGTGTGCTCATAACA---TGGGTTAATTCATATCTACGAAAGGAAATC
-1653
pOsPYL9 TGCATTAAAAAAATGTAAAGG-TCAAGTATTAAGTTTGCTCATAATAATATGTGTTAATTCATATCTACGAAAGGAAACC
-1706
-300 element
pOsPYL8 AATGTTCCACTGCCTTTGTATATGAGGGTACATGTTACAAACATCCAAATATGAAGTCCCTAATGATCTTTACCTTTTCA
-1573
pOsPYL9 AATGTGCCACTGCCTTTGTATACACGGCTACATGTTACAAACATCCAAATATGAAGCCCCTAATGATCTTTACCTTTTCA
-1626
Skn-1
ACGT
pOsPYL8 CTGAAAGATAAATGATTTGATAATGTCATGTAGAATCTGAATAAGCAATTGTTTAGTTTTGTATGTAGCCTGCGCTTGCT
-1493
pOsPYL9 GAGAAAGATAGATTATGTGATAATGTCATGTAGAATCTGAATAAGCAATAGTTCAGTTTTGTACGTAGCCTACACTCGCC
-1546
-300 core
pOsPYL8 ACTTGCGCTCCCAGGATTCAAGTTTGAACTGAAGTAGTGTTTATCCTTGTACAGTGCACACTAGAGCCCTTCCCACTTTA


-1413
pOsPYL9 GCTTGCGCACCCAGGATTCGAGTTTGAACTGAAGTAGCGTTTATCCATG----------CTAGAGCCCTTCCCACTTTA
-1477
pOsPYL8 CACAAGGTTAAGACAGGAGAGGGCTGGAGCGTATTAAGAAAAAAAAATGTAAGAGGTTCTTTTTGTTACATGTCTCACGGC
-1333
pOsPYL9 TACAAGGTGAAGACAGGAGAGGGCTGGAGCGTATTAAGGAAAATAATGTAAGAGGTTACTGTTGTTCCATGTCTCACAGC
-1397
-300 element
pOsPYL8 ATGAACAATGTACTTGTCACTAAAAAGA-GTATAAGCATGCAGTAGATTTGCATATACACGCACCAAGTTTCCTATTCGC
-1254
pOsPYL9 ATGAAAAATGTACTTAGCACTAAAAAAAAGTACAGGCATGTAGTAGATTTGCATATGCATGCACCAAGTTTCCTATTCGC
-1317
Prolamin box
pOsPYL8 ATCAAGTTTGAAGTGAAGTCTTTTTGTCCTTGTGCAGTGCACGCTACAACTCTTTGCACTTTATACCACTTTATACAAGA
-1174
pOsPYL9 ATCAAGTTTGAACTAAAGCCTTTTTGTCCTTGTGTAGTGCACGCTACTGCTCTTGGCACTTTATACCACTTTATACAAGG
-1237
pOsPYL8 TGAATACGAGAAGGCAAACAAGAAAAA--TGCAACATGCTACTTTAATGCATGGCTTCAGATTTGCTGGCCTATGCCGTG
-1096
GCN4
pOsPYL9 TGAAGACGAGAAGGGAAAAAAAAAAGAACATGCAACATGTTCCCTTGATGCATGGTTTTTTGTTTGCCAGCCTATGCCGTG
-1157
Skn-1
pOsPYL8 GTCTAAAAATCTTAGTTACCTCTT-CTGGATTGTGCCTTAAGGACATGAGCAATGCCCCTAGTGCTAAAAAGTACAAGTA
-1017
pOsPYL9 GTCTAAAAATCCGAGTTACCTCTTTCTGGCTTGTGCCTTAAGGACATAAGCAATGCACCTGGTGCTGGAAAGTACAAGTA
-1077
pOsPYL8 AGCAGTTGGTGGCATCAACAAATGAGTAAAGAGAAATGGCTTCCTACTTTCATCCCATTAATTATGGGTTTATTTATATT
-937
Skn-1
pOsPYL9 GGCAGTTGGTGGCATCAACAAATGAGTAAAGAGAAATGACTTCCTACTTTCATCCCACTAATTATGGGTTTATTTATATT
-997
P9DL-1-F


pOsPYL8 TAACTTAATAATTTGGTGATTAGTTTAATTAGTCATAGGTCCATCAATCCTTGGTGGTTGATTTAGAACAGATGGGTTGG
-857
pOsPYL9 TAACTTAATAATTTGGTGATTAGTTTAATTAGTTACAGGTCAATCAATCTATGGCTATTGATTTAGAATGAATGGGTTGG
-917
-300 core
Prolamin box
pOsPYL8 ATGTAAAGAATGTCGCACGCTCATATTACTATGCAATGGAGGATATAATTCCGATTCACATATATACAATCTTTGCAAAT
-777
pOsPYL9 ATGTAAAGAATGTCGCGTGCTGACATTACTATGTAATAGACGATATGATTCCGATTCACAAATATGCAATCTTTGCAA-C
-838
-300 element
pOsPYL8 AGTTAAAATAAAAGGATTATTTCTAAGATTGCTTTTTCACCATGATAGAGCCAAT----------
-722
pOsPYL9 CGCTAAAATAAAAGAATTATTTTTAAGTTTGCTTTTTCACCATGCTATAGTCAATAAAAGTTTTTTATTTATGCTCCAAT
-758
P9DL-2-F
pOsPYL8 --------------TTCACCTACTTTCTTAATAGCCATGTACAATTGTAG----------GCTATA
-680
pOsPYL9 GTTCCCTAATCAATTTCATCTACTTTTTTAATACCCATGTCCAACTATAGAAATGCTTAAATTTTGGGATAGAGGCAATA
-678
pOsPYL8 ACTAATAAGGCTCTAGGACAATTCAAATGGTTTTGGGCTTATTTTTTT-----AACTTTTTTATGCTCTAGAAAGCTACT
Skn-1
-605
pOsPYL9 ATTAATAAGGCTCTA
P9DL-3-F
CAAATGGTTTTGGGCTTATTTTTTTTTTTTAACTTTGTTATGCTCTAGAAAGCTACT
-598
pOsPYL8 AAGAACTGGTTAGGAACATAATAATTTCATCGGTATTTTCTTTTTAAGAAATGTTTACTGAAAAGACAATGGGCACTACT
-525
pOsPYL9 AAGAACCGGTTAGGAATATAATAATTTCATTGGTATTTT---TTTAAGAAATGTTTACTCAAAAGACAATGGGCACTATC
-521
pOsPYL8 T-GCATGAACTTATTTAATCATAGGTGGCTCATATTGCAATCAAATGAAATTCTTGCATCCGAAATAGTGTCAATAATAT
-446


pOsPYL9 TAGCATGAACTTATTTAATCAGAGGCGGTACATATTGCAATCAAATAAAATTCTTGCATCCAAAATAGTGTCAATAATAT
-441
pOsPYL8 CACTTTTACCATTTTTAGCTTTTTGGACCAGACAAGCTAAAGATACAGTAACATCACAGAAATAGATCAATATGACTACA
-366
pOsPYL9 CACTTTTACCATTATTAGTTTTGTAGACCAGACAAGCTAAAGATACAGTAACATCACAGAAAAAGATCAATATGACTATA
-361
pOsPYL8 ATAAAACAGCTTCGTATAGCATGAGACCTCGCCAATGGTTTTATCAATTAAATATTATTTCAGAAAGAGTGCGAGGCATC
-286
pOsPYL9 ATAAAACAGCTTCATATAGCATGAGACCTCGCCAATAGTTTTGTCAATTAAATATTATTTTAGAAAGAGTGCAAGGCATC
-281
ACGT
pOsPYL8 TTCGGTTTCCGCATAATCAAGGATACACGCAAACACGTTTGGTTCATTGCATGCCTTACACACTATTGCATGAACCTAGT
-206
P9DL-4-F
pOsPYL9 TTCGGTTTCCGCATAATCAAGGATACACGCAAACACGTTTG-TTAATTGCATGCCTTGCACACTATTGCAAGAACCTAGT
-202
ACGT
pOsPYL8 CAGCCCGCTGGTTTGCTTTCCTCCATCGCTTCACGTAAGCACATTGCCATGATCGAGCTCATGCTCACCTTCCATTCGGC
-126
pOsPYL9 CGGCCCGCTGGTTTGCTTTCCTCCATCGCTTCACGTAAACACATTGCCATGATCGAGCTCATGATCACCTTCCATCCGGT
-122
CAAT box
GCN4 motif
pOsPYL8 GGCTACCTCCAATGAAAGGAGACAAGCCAAGCACACAGTTTGCTTCACATAATCACAAAGCAGATTGCCGAAAGGGTTAT
-46
P9DL-5-F
pOsPYL9 GGCTACCTCCAATTACAGGAGACAAGCCAAGCACACAGTTTGCTTCACATAATCACGAAGCAGATTGCCGAAAGGGTTAT
-42
TATA box
pOsPYL8 GTTGCTGGCTATATATATACCACCCTTGTGCTTGGCG----------GTTTATTCCATCCCATCAA
+10
pOsPYL9 GTTGCTGGCCATATATATACCACCCTTGTGCTTGGCGTATATACCACCCTTGTGCTTGGCGGTTTGTTTCATCCCATCAA
+38

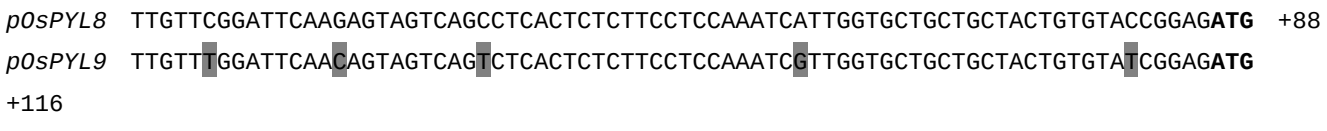


Fig. S1. Sequence alignment of the *OsPYL8* and *OsPYL9* promoters. Motifs involved in endosperm-specific expression were predicted by searching against the PLACE and PlantCARE databases and are boxed and indicated above the sequence. Forward primers used for amplification of the 5′-deletion *OsPYL9* promoters are underlined by arrows. The TSS nucleotides for the *OsPYL8* and *OsPYL9* promoters are underlined.

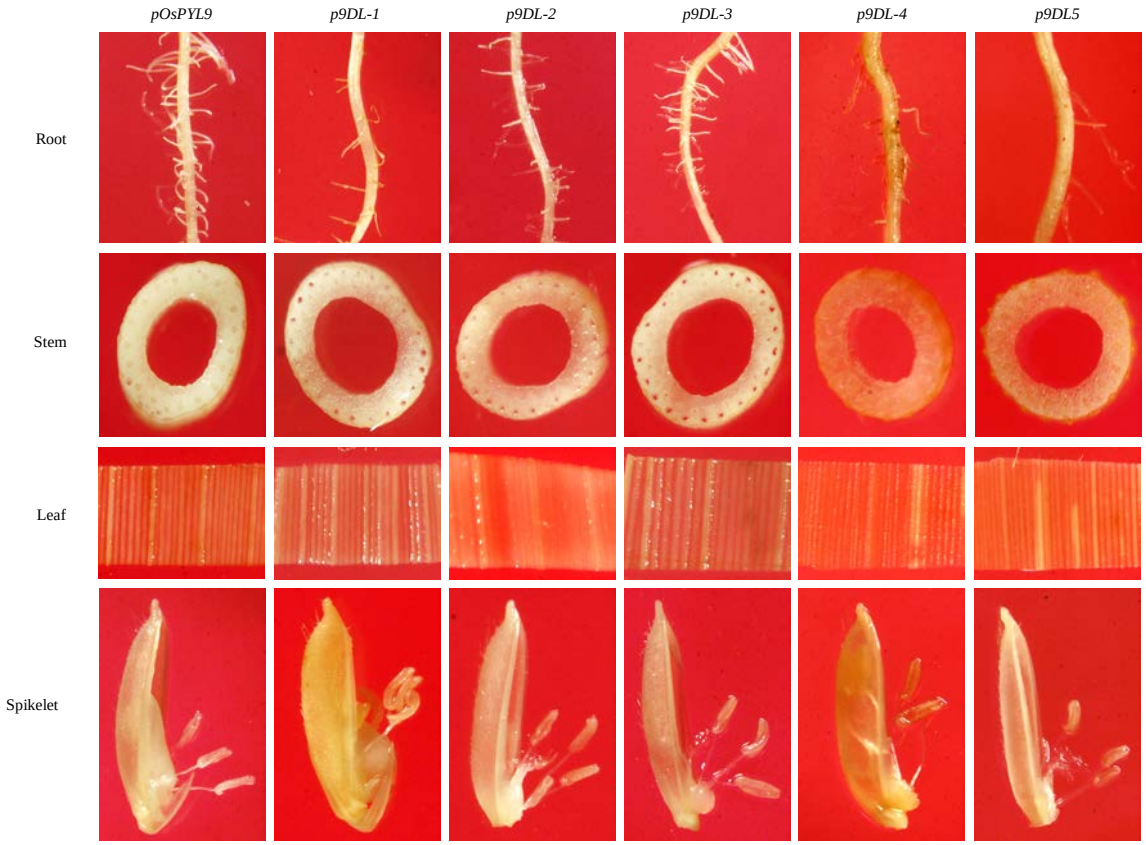


Fig. S2. GUS activity in the roots, stems, leaves, and spikelets of rice plants transformed with the truncated *OsPYL9* promoter-*GUS* fusions.

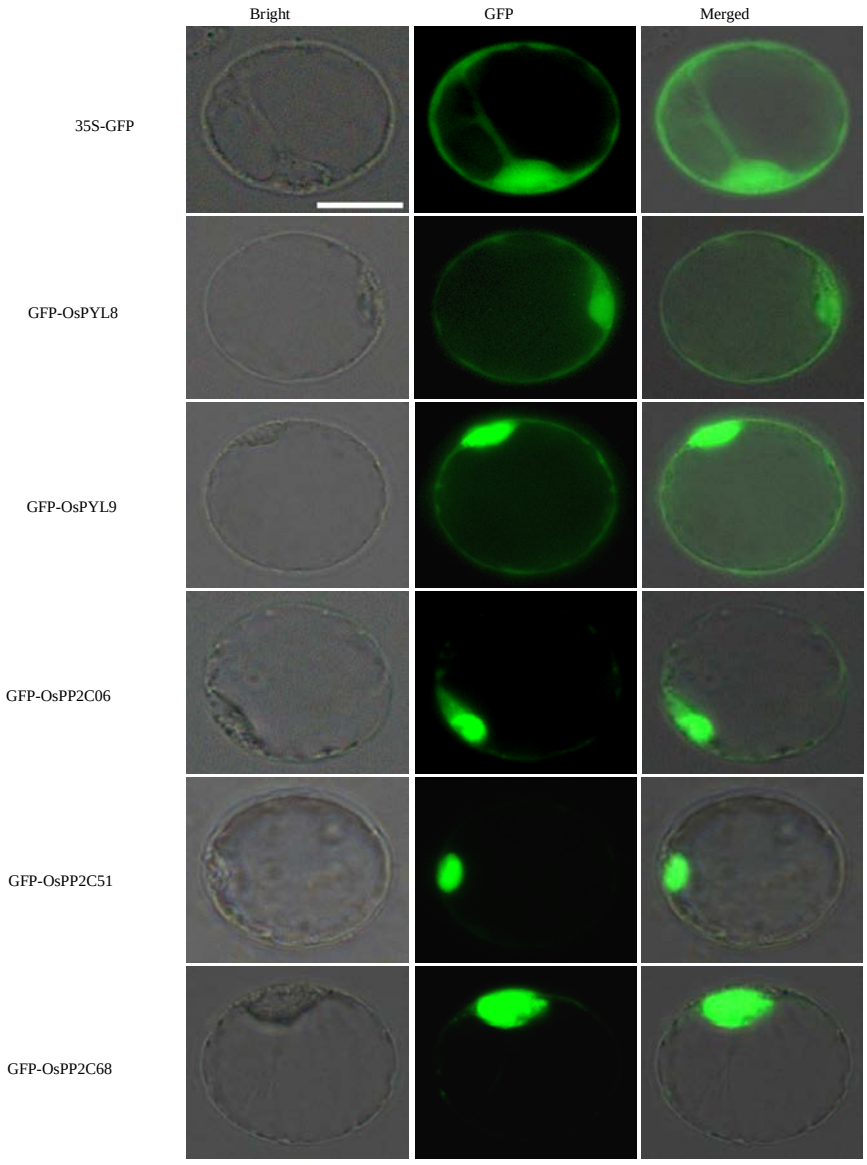


Fig. S3. Subcellular localization of OsPYL8, OsPYL9, OsPP2C06, OsPP2C51 and OsPP2C68 in rice protoplasts. Scale bar, 20 μm.

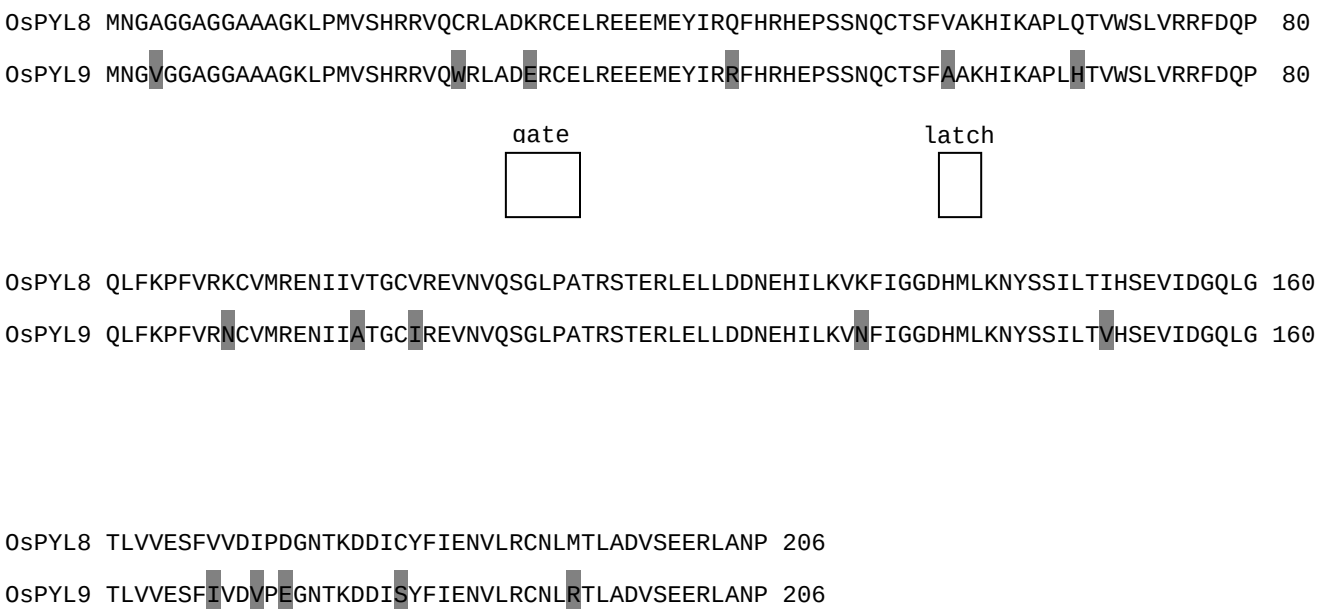


Fig. S4. Sequence alignment of OsPYL8 and OsPYL9. The gate and latch loops are boxed and indicated above the sequence.