

**Supplemental Table S7. Primer sequences used in this study.**

**Primers used to produce deletion versions of *AtPAP10* promoter (5'-3')**

AtPAP10 FLP F	TCTAGAGTAGAATTTTCATCTGATTTAGGCTC
AtPAP10 $\Delta$ 1 F	TCTAGACTTGGCACTCCACAAAACC
AtPAP10 $\Delta$ 2 F	TCTAGATCATGAGTTAGAGTGCTGTTTTTC
AtPAP10 $\Delta$ 3 F	TCTAGACTGTGCACCACTGATTAGTCTG
AtPAP10 $\Delta$ 4 F	TCTAGAGAGGAAGCATAGATTCGTGTG
AtPAP10 $\Delta$ 5 F	TCTAGACATTTGGCCATTTGGGTC
AtPAP10 $\Delta$ 6 F	TCTAGAGTTGACGACACGGCTCC
AtPAP10 $\Delta$ 7 F	TCTAGACATCAAGCCTCATACATTTCC
AtPAP10 R	CCCGGGGATCCTTTTG

**Primers used to produce P enhancer versions (5'-3')**

For making AtPAP10 FLP-LUC	PZH01-AtPAP10 FLP-LUC F	CCAAGCTTGCATGCCTGCAGGTCCCC CCAAGTGAGAACATGTCATGC
	PZH01-AtPAP10 FLP-LUC R	GCGGCCGCTCTAGAAGTGGATCC TTTTGGATTCTGAGATTTTTTTTTTATT C
For making AtPAP10 P-LUC	pZH01-AtPAP10 P-LUC F	CCAAGCTTGCATGCCTGCAGGTCCCC GAGGAAGCATAGATTCGTGTGTC
	pZH01-AtPAP10 P-LUC R	GCGGCCGCTCTAGAAGTGGATCC CTCGATATGGAATATGTTAACGAACG
	35Smini for P-LUC F	CATATTCCATATCGAGGATCCGCAAGA CCCTTCTCTATATAAGGAAGTTCATT TCATTTGGAGAGGACACGCTGTCTAG AGCGGCCGCCACCGC
	35Smini for P-LUC R	GCGGTGGCGGCCGCTCTAGACAGCG TGTCCTCTCAAATGAAATGAACTTCC TTATATAGAGGAAGGGTCTTGCGGATC CTCGATATGGAATATG
For making P-UTR-35Sm ini-LUC (no UTR)	pZH01-AtPAP10 P-LUC F	see above
	P-UTR R (no UTR)	GGCCGCTCTAGAAGTGGATCCAG AAAAAACCTTATAAGAGAAGAG
For making PS -35Smini-LU C	pZH01-AtPAP10 P-LUC F	see above
	PS-overlap R	GATGTACGTCCGCGGAGTTAATGGAG CCGTGTCGTC
	PS-LUC R	GCGGCCGCTCTAGAAGTGGATCC AGAAAAACCTTATAAGAGAAGAGAC AGGGGAAATGTATGAGGCTTGATGTA CGTCCGCGGAG

7 **Primers used for plant transformation vectors (5'-3')**

pZH01-PHL2 gDNA F	GAACACGGGGGACTCTAGAGGGATCCAATACGT CCAAACTATATCCACCCG
pZH01-PHL2 gDNA R	GTTTGAACGATCGGGGAAATTCGAGCTCTTCAT CATTTC AATGTTTATTATAG
PZH01-PHL3 gDNA F	GGGGGACTCTAGAGGGATCCTGTCTTGTCCAAT CTATCAACTCG
pZH01-PHL3 gDNA R	GATCGGGGAAATTCGAGCTCTTATGAGTATTTAA TGAGTATTTTTTATG
pZH01-PHR1 gDNA F	ACGGGGGACTCTAGAGGATCCCCGGGAAGAAG GCGAAGAAAATCATC
pZH01-PHR1 gDNA R	TTGAACGATCGGGGAAATTCGAGCTCAA AACTT TTCAGGTTTGATATTC
PHL2-pJG186-GFP F	AGAACACGGGGGACGAGCTCATGTACTCAGCG ATTCG
PHL2-pJG186-GFP R	TGAGGAGAAGAGCCGGGCCCTCCAATGGTGC TACTAGGC
PHL3-pJG186-GFP F	AGAACACGGGGGACGAGCTCATGTACTCGG?C GATTCGG
PHL3-pJG186-GFP R	TGAGGAGAAGAGCCGGGCCCTCCAATGCTAC TACTAGG
pJG053-GFP-PHL2 F	ACGCGTCCC GGGGCGGTACCATGTACTCAGCG ATTCGCTCGCTTC
pJG053-GFP-PHL2 R	TACGAACGAAAGCTCTGCAGTTATCCAATGGTG CTACTAGGC
pJG053-GFP-PHL3 F	ACGCGTCCC GGGGCGGTACCATGTACTCGGCG ATTCGGTC
pJG053-GFP-PHL3 R	TACGAACGAAAGCTCTGCAGTCATCCAATGCTA CTACTAGGC

8

9 **Primers used for protein expression in *Escherichia coli* (5'-3')**

pMAL-PHL2 F	AGGATTTACATATGTCCATGGGCGGCCGCATGTA CTCAGCGATTTCGCTCGCTTC
pMAL-PHL2-HIS R	CCTGCAGGGAATTCGGATCCGTCTGACTCAGTGGT GGTGGTGGTGGTGTTC AATGGTGCTACTAGGC
pMAL-PHL3 F	AGGATTTACATATGTCCATGGGCGGCCGCATGTA CTCGGCGATTTCGG
pMAL-PHL3-HIS R	CCTGCAGGGAATTCGGATCCGTCTGACTCAGTGGT GGTGGTGGTGGTGTCCAATGCTACTACTAGG
pMAL-PHR1 F	AGGATTTACATATGTCCATGGGCGGCCGCATGGA GGCTCGTCCAGTTCAT
pMAL-PHR1-HIS R	GCAGGGAATTCGGATCCGTCTGACTCAGTGGTGGT GGTGGTGGTGATTATCGATTTTGGGACGC

10

11 **Sequence of oligonucleotides for EMSA probes (5'-3')**

P probe F	GAGGAAGCATAGATTCGTGTGTCCTCTGGACCAGATAATT AAAAATAAATATCCAACCGTTTCGTTAACATATCCATATCGA
P probe R	TCGATATGGAATATGTTAACGAACGGTTGGATATTTATTTTT AATTATCTGGTCCAGAGGACACACGAATCTATGCTTCCTC
Probe 1 F	GAGGAAGCATAGATTCGTGTGTCCTCTGGACCAGATAATT AGAGGAAGCATAGATTCGTGTGTCCTCTGGACCAGATAAT TA
Probe 1 R	TAATTATCTGGTCCAGAGGACACACGAATCTATGCTTCCTC TAATTATCTGGTCCAGAGGACACACGAATCTATGCTTCCTC
Probe 2 F	CCTCTGGACCAGATAATTAAAAATAAATATCCAACCGTTCC CTCTGGACCAGATAATTAAAAATAAATATCCAACCGTTC
Probe 2 R	GAACGGTTGGATATTTATTTTAATTATCTGGTCCAGAGGG AACGGTTGGATATTTATTTTAATTATCTGGTCCAGAGG
Probe 3 F	AAAAATAAATATCCAACCGTTTCGTTAACATATCCATATCGAA AAATAAATATCCAACCGTTTCGTTAACATATCCATATCGA
Probe 3 R	TCGATATGGAATATGTTAACGAACGGTTGGATATTTATTTTT CGATATGGAATATGTTAACGAACGGTTGGATATTTATTTTT
Probe a F	GAGGAAGCATAGATTCGTGTGTGAGGAAGCATAGATTCGT GTGT
Probe a R	ACACACGAATCTATGCTTCCTCACACACGAATCTATGCTTC CTC
Probe b F	CCTCTGGACCAGATAATTACCTCTGGACCAGATAATTA
Probe b R	TAATTATCTGGTCCAGAGGTAATTATCTGGTCCAGAGG
Probe c F	AAAAATAAATATCCAACCGTTCAAATAAATATCCAACCGTTC
Probe c R	GAACGGTTGGATATTTATTTGAACGGTTGGATATTTATTTT
Probe d F	GTTAACATATCCATATCGAGTTAACATATCCATATCGA
Probe d R	TCGATATGGAATATGTTAACTCGATATGGAATATGTTAAC
P1BS probe F	ATTAACGAATATCCGTACAATTAACGAATATCCGTACA
P1BS probe R	TGTACGGAATATTCGTTAATTGTACGGAATATTCGTTAAT

12

13 **Primers used in T-DNA identification (5'-3')**

PHL2 T-DNA FP	CCGGTGGACAACCTGAGCTTC
PHL2 T-DNA RP	GAGACCCTTCACTCCCATTTGTTT
PHL3 T-DNA FP	TTGTTTTTGTCTTGAGCCAGG
PHL3 T-DNA RP	GTGCATTTACGCAAATGTGTG
LBb1.3	ATTTTGCCGATTTCCGGAAC

14

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18 **Primers for qRT-PCR (5'-3')**

P sequence F for ChIP	AAGACAACAAAAGAGGAAGCATAGATT
P sequence R for ChIP	GGAATATGTTAACGAACGGTTGGA
3'UTR F for ChIP	GAATCTATGAGGAATAGGATTTGTTG
3'UTR R for ChIP	TGGCACAAGAACTCTCAAACAAT
AtPAP10 FP qPCR	TCCTGTTGATGATTCTCCTTCTTG
AtPAP10 RP qPCR	ATTCATTTATTTGGATGGTTGTTCA
Actin2 FP qPCR	GACCTTGCTGGACGTGACCTTAC
Actin2 RP qPCR	TAGTCAACAGCAACAAAGGAGAGC
PHL2 FP qPCR	CGGTGGACAACACTGAGCTTCAT
PHL2 RP qPCR	GTTTTGGGAGTCGCTTTGTCA
SPX1 FP qPCR	CCGTCGGAATATCGAAAGAA
SPX1 RP qPCR	TCCTTGACAAGCTTGAACAATAAG
SPX2 FP qPCR	GAAGAGCACTGTGTGCGGCATT
SPX2 RP qPCR	GTGGCAACGAGAAGACGCTAA
At4 FP qPCR	TGGCCCCAACACAAGAG
At4 RP qPCR	CGAACATTCACAATCATAATCTCC
IPS1 FP qPCR	AGACTGCAGAAGGCTGATTCAGA
IPS1 RP qPCR	TTGCCCAATTTCTAGAGGGAGA
ACP5 FP qPCR	CTTAAGTCCTATTGCAGGCTAGGT
ACP5 RP qPCR	TTGCTAAAAATGATAGGGATGCT
AtPT2 FP qPCR	CGAAGCTCCTCGGTCGTAT
AtPT2 RP qPCR	GGAGAGTCCCAGGCTTTTGT
Ph1;5 FP qPCR	CAGCAGCAACCTCTTCCAAAA
Ph1;5 RP qPCR	CGTGGATTGCGTTCATTGTT
SULTR1;3 FP qPCR	TCGCGGCGATCTTATTGC
SULTR1;3 RP qPCR	GACTCGCGAGCTTTGCATATC

19

20