

***FtMYB8* from Tartary buckwheat inhibits both anthocyanin/proanthocyanidin accumulation and marginal trichome initiation**

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Additional file

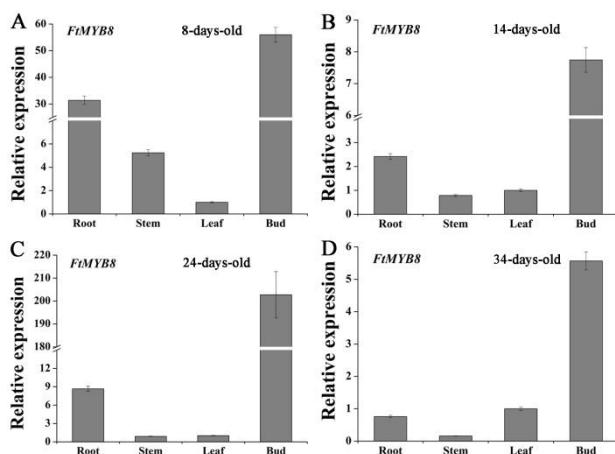


Figure S1. Expression of *FtMYB8* during Tartary buckwheat development.

The relative expression of the *FtMYB8* gene was evaluated by the $2^{-\Delta\Delta CT}$ method. *FtH3* was used as a reference gene.

The accumulation of *FtMYB8* mRNA in the leaves was defined as "1" at each developmental stage. Means were calculated from three repeats, and error bars reflect \pm SDs.

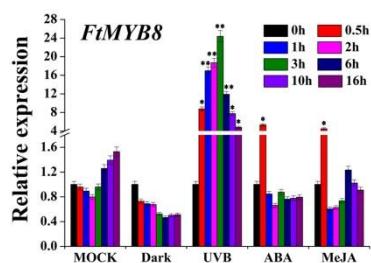


Figure S2. Relative expression of *FtMYB8* in Tartary buckwheat seedlings under the influence of environmental factors and hormone treatments.

The relative expression of the *FtMYB8* gene was evaluated by the $2^{-\Delta\Delta CT}$ method. *FtH3* was used as a reference gene.

The level of *FtMYB8* mRNA at 0 h was set to "1". Means were calculated from three repeats, and error bars reflect \pm SDs. **P < 0.01; *P < 0.05.

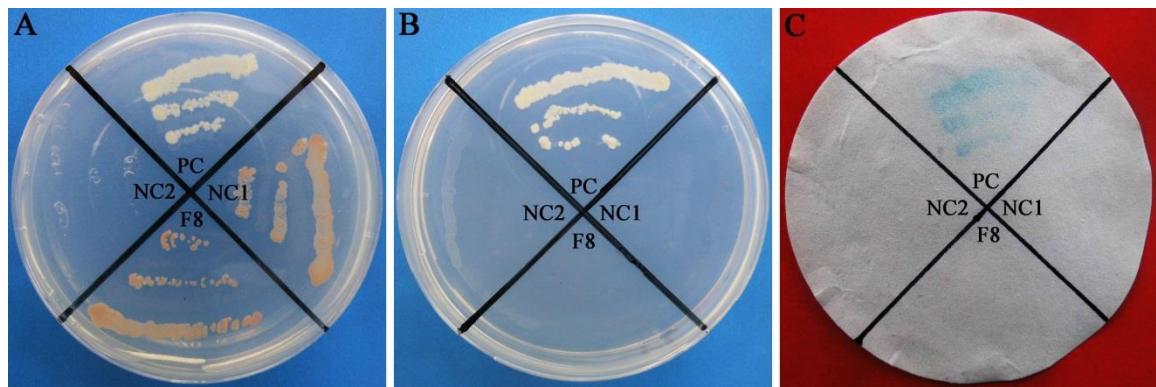


Figure S3. Transactivation assay of *FtMYB8* in AH109 cells. (A-B) The transformed cells were selected on SD/-Trp and SD/-His-Trp media. (C) β -Galactosidase activity assay. PC: pBridge-*FtbHLH2*; NC1: empty plasmid; NC2: AH109 cells; F8: pBridge-*FtMYB8*.

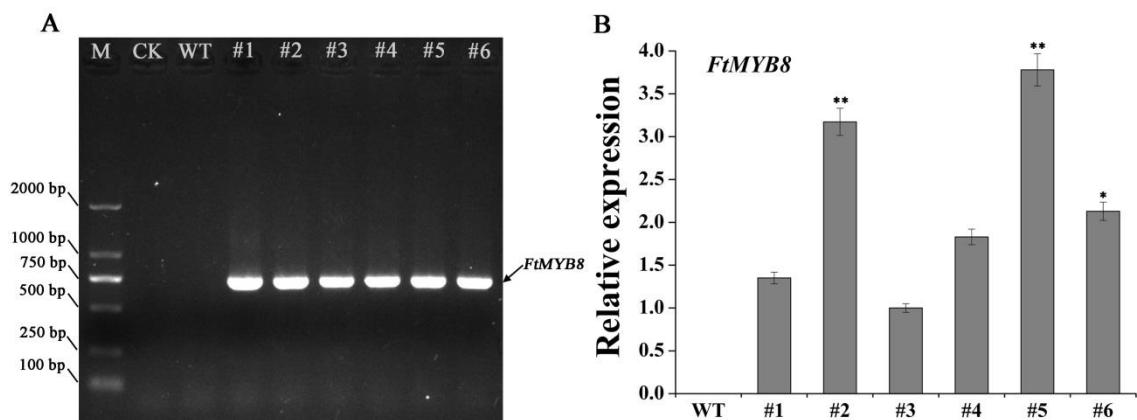


Figure S4. Generation of transgenic tobacco plants.

(A) PCR amplification of transgenic tobacco. Lane M, DNA marker 2000; lane CK, water, as a negative control; lane WT, wild-type tobacco; lanes #1 to #6, transgenic tobacco. (B) Detection of *FtMYB8* gene expression in transgenic tobacco and WT tobacco by qPCR. The tobacco β -actin gene served as an internal control. Error bars represent \pm SDs. ** $P < 0.01$; * $P < 0.05$.

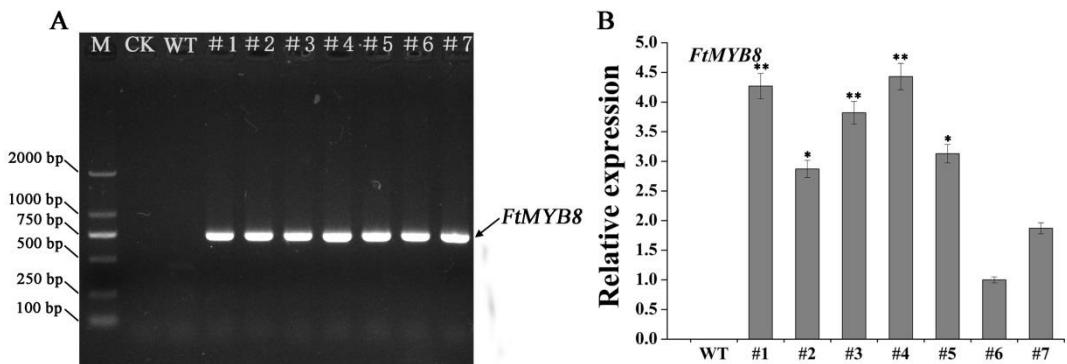


Figure S5. Generation of transgenic Arabidopsis plants.

(A) PCR amplification of transgenic Arabidopsis. Lane M, DNA marker 2000; lane WT, wild-type Arabidopsis; lane CK, water, as a negative control; lanes #1 to #7, transgenic Arabidopsis. (B) Detection of *FtMYB8* gene expression in transgenic Arabidopsis and WT Arabidopsis by qPCR. Arabidopsis *Atactin2* served as a reference gene. Error bars represent \pm SDs. ** $P < 0.01$; * $P < 0.05$.

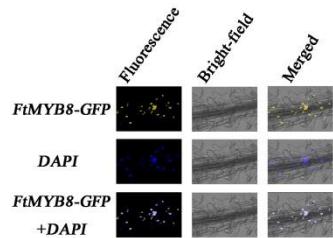


Figure S6. Subcellular localization of *FtMYB8*.

Root of *FtMYB8*-overexpressing Arabidopsis under a fluorescence microscope. DAPI was used as a nuclear localization marker.

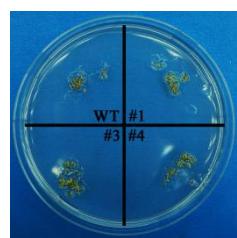


Figure S7. Seed germination of WT and transgenic lines.

WT and transgenic seeds germinated on MS medium; photos were taken after three days of germination.

Table S1. Sequence of the *P_{F1MYB8}* promoter

Gene	Sequence (5'→3')
<i>P_{F1MYB8}</i>	TAGGAAGGTATGACAGTTGATTGGTTATTAGTTGCCTCTAAATTACACTTATTCTAA TTACTAGTTTACITTAACATATTGTATTACCTAAAAAGAACCTGATTATCTATTACTCA ATGAGTACGAACACAAAAAAGATATGAGTGGATGATGGATCAGATGAAAATTAGGGAT GGATCGAGTGATGTGAGTGGTTATCCCGTCAATCGACCCGTTGCCGACCCTATATAAGATT AAGCTAATACATCATAGCTAATTATATCCTGTCAATTGTAAGCTTGAATGCAAGATGCATAG AGGTTATGAAAGCTTGTGGCGTTCAATCAACATTATAGTTAAGGTTTATATGTGGTAATC TCTTATTGAATAACATATTITATCAGGTGTCAATTCTATTAAATCAAAGTTAAATTAAATTTT CTTCAAAAAAATACAAATATAACTTATTGAAGGTAGGCTCATATTAATAACAACACTCAATTG AAGTCAATCAACAAATCCCTAACTTGGTGAACTTACACCAATAAAAGTTACCAATTAGAAA TGTGGAAATATACATTAAAACACAAAAATTGGAAAAAAACATAAAATACTAA AATGGATTAAGTGAATCCAAGTTCAATAATGTTGTCAATTACTTTCTGACATTGCA TTAGTATAGTTGTTAAATTAGAAATGTTATTGTCTACAATAATTCTAACTGACAACGATGTCA TCCTTTATTAAATTGAAAAACGTTAAGGAAATAAAACTTTTATTAAATTAAAAAA TGTTCATAGAGCATGGTAGGTTGTGGGTAAGTAAGAATGGGGATCTGCATGCGGAGGC AAAAAGAAAACGACTGCTACTAACGGTGTCAATTCCCTCACGGTAAACAACCAAGTCAGCG TTGTACGGTTACGGAATCAATGCACCAATTCTAACGGACTTAACCAAAATGTTAACAAAC CAACTAACCAAAGGTTAAATTGAAACGGATTTTTAAATTCAATATTCAATT TTAACAGATTACTACATACAGTTAAAGTTAACTTAGACAGATAACAAGTTGTCTGCTCCTT ACATGTCCATCATTAAATTAAATATAAGTTAGTTGTCTCATAAAATTGGCTAAAGATATT TGTGGAAACAATCTAATATTAAATGAATATTATAACAAATTGATGGGTTAATTCTT TTCAATTGGTTTATTGATAAAATTGAAACATACGATGTACTTTTACATGATGTT GAAATCGGACCTACCATAATTAAAGATCTATTGTTATTGAAAGTCAAACCTAAAGTCT TCACAAAGAAATGTATTCTTAAATTATATTATTTCTTAAACTGAGATGCTAAATAAAC ATTTTCTTCTTAAATTCTTCAATTGTTAGTTCTAGTTAAAGCCTAAACCTGAAAGATAGTAA AGTGTCTCATCCGAATGAGTACATGTTGTTGATCTTACAGTTGCTAAAGTAA CTAGTTGGTCCGAGCTAAAGTTCCAGCTTCTAAATGTGTTATAATCGACTTATTAGTC AAAGTGAATGGGTACAAGCTAATTCTTACGAGTTGATCTCAAATAGGCTGATTCACT CCGATTGAATATTGACTGTCTAGTCTTCTTAGGATTCAAGAATGTTAGAACTACCCAA ACTTTGGTATACTCGTGATTAGCTCGTTGGAATCGGGTTGATGTCACAAAGTTAAATTAA CCGAACATACAAATAATATTCAATTCTTACTCAAGTGTGCTCCGAGTCT GAATTGAGTTCTTCGAGTTGAGCTCGGATAACTTGGTTTAAAGTAAACAAATAGAACCGA TGCAGCATTCTATTGTACGTACTTGTAGAAGTCCTATGTTAGGAAAGTGTGCAACAAGACA TTACTATGCCGTATAGTATAAAAGAACGTTCTCAATTCTGGCGCTATTGCTGCGTATG CGTGACCCACCTAAATAGTCTCTCCTCAAACCGCCGTCAGTCAACTCATCTCGATACTC TTAAGTATTCTTAAAGAACGTTGATTTTATATATGTGCAAGCAGCTCTGCCAGTTAACG CCGTAATCTATCCCGTGTGACTGATTCTTCTTTGTTGATCGACTGAGCTTGCCGG ATCAAACCTCGATAACCGCGA

Table S2. Predicted cis-elements of the *P_{F1MYB8}* promoter

Name of the element	Sequence	Function of element	Number
ABRE	GCAACGTGTC	cis-acting element involved in the abscisic acid	1

		responsiveness	
AE-box	AGAAACAA	part of a module for light response	1
ARE	AAACCA	cis-acting regulatory element essential for the anaerobic induction	6
AT-rich element	ATAGAAATCAA	binding site of AT-rich DNA binding protein (ATBP-1)	1
ATC-motif	AGTAATCT	part of a conserved DNA module involved in light responsiveness	1
Box 4	ATTAAT	part of a conserved DNA module involved in light responsiveness	4
CAAT-box	CAAT	common cis-acting element in promoter and enhancer regions	41
CCAAT-box	CAACGG	MYBHv1 binding site	1
CGTCA-motif	CGTCA	cis-acting regulatory element involved in the MeJA-responsiveness	1
GA-motif	ATAGATAA	part of a light responsive element	1
GATT-motif	CTCCTGATTAGC	part of a light responsive element	1
GT1-motif	GGTTAA	light responsive element	4
O2-site	GATGACATGG	cis-acting regulatory element involved in zein metabolism regulation	1
TATA-box	TATA	core promoter element around -30 of transcription start	60
TCT-motif	TCTTAC	part of a light responsive element	1
TGACG-motif	TGACG	cis-acting regulatory element involved in the MeJA-responsiveness	1
circadian	CAAAGATATC	cis-acting regulatory element involved in circadian control	1

Table S3. cDNA sequences of *FtGL3*, *FtEGL3*, *FtTT8* and *FtTTG1* genes from Tary buckwheat.

Gene	cDNA sequence (5'→3')
<i>FtGL3</i>	ATGGAGAAAGTTCACAAATCTAAGAAAACAGCTTGCATTGCTGTAAGAACGATTCAAT GGAGTTACTCAATTCTGGTCAATTCCCTCTGAACAAGGTGTTGGAAATGGAGTGAA GGGTTTACAATGGAGATATCAAAACAAGAAAAACTATACAAGCTGTTGAATGGGATGTAG ACCAAATGAGCTGAAAAGAAGTGAACAAATTAAGAGAGCTTATGAATCTCTTAACGTG

TGAAACTAACACTCAAACAGAGACCTCAGCTGACTGATTCTGAAGATCTTCTGATA
CTGAATGGTTTATTGGTTGTATGCCTCGTCTCAATCTGCCAAGGGTACCCGAA
CAGCTTACAAAATGGCGAGCCTATATGGCTATGCAATGCTCACCAAGCGGATAGCAGATTG
TTCAGTCGCTCTCTCGCTAACAGAGTGCTCAATTCAAGACTGTAGTAGCTTCTTCTTA
GGAGGCGTAGTTGAGCTCGCGCTACCGATTGGTTAGAGGATCATTGATCAAATA
TGTTCAAGATTCTCTTGGTACTGATTGCTCAGCACTCCTCAGATAACCAATTCAAGTAAC
ACAATGTGAAGAGTTGAGATTGGTAGAGTGCTGAATAACAGCTGATTCAATGGAGG
ATACTAAATCTATGACTGAAAATGTAATGTGGATCTTATAGATGATGATTGAGTAAC
GTGTTTACTTCCATGACATCCAATGATTGCATATCTCAGAGCCTCGGGTATCCTGAGGATC
TCCTTACTCTCCGAAGATTGAGAATGTATCCGAATTCAACACAGCACAGGAGAAT
ACAGAAGATAGTTGTATGAGAACTGAGTTAGATGATGTTCAATTACAAGAATGTTCTGG
TAGTATATTCAATACTAGCCACAGTTGATCAGGGACCGTTCATATCGTAATTAAACATGAA
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CGCAAAGGATCTTGAAGAAGATACTTTTGAAAGTTCCTCGGATGCATAGTGTATCCTCGTCC
GAGAATAATGTGGATGGTACCGGATAAAAACCGATTGTGAAACCCGAAGCTGATGAGC
TTGTCTCAAACCGGATGCTGTTCCAGGAGACGGGAGAGTGTGGATGATAGATTTT
CGAGTTAAAATCATTGATTCCCTCATTGATAAGGTTGATAAGGTGTCTATACTGATGACAC
AATAAAGTACATGAAAGAGCTTGAGAGGAGAGTTGAAAGAGCTTGAGGGAAAGTCAAGATCA
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CAACATCATCCAAAAAGATGTCTCGATTGACATAACATGTCCTGGAGGAATGCTTGTAC
TCGAGATCATAGATGCATTAAACAAATCTACGACTAGATACTCACTCGGTCATCCTCAAGAT
CCGATAACCTCTATCCATAAACATCAAAGCAAAGATCAAAGTACCGGGGGTTATCCCG
GGAATGATCAGGCAAGTGTACAAAGAGTCGTGATAAGAAGTTGA

FtEGL3 ATGGAAACTGGGCTCCAAAACCTAACAGGAAAGCAGCTGCTCTGCTGTAGGAGCATCCAAT
GGAGTTACTCCATTCTGGTCAACTTCTCCTCTGAACACTAGGGTACTAGAATGGGGTGA
GGATACTACAATGGAGATATCAAGACAAGGAAAACAATTCAAGCTGGTGAATTGATGTAG
ACCAGATGGCTGCAAAGGAGTGAGCAGTTAAGGGAGCTTATGAGTCTCTATTAGCTGG
TGATAGCAACCCACAAGCTAGAAGGCCATCAGCTGCACTGTCTCTGAAGACTTGTCAAT
ACCGAGTGGTATTACTGGTTGTATGTCATTGCCCTCAATCTGGACAAGGGTTGCCGG
AAGAACCTTAGAGACCGGTCAGCCTATCTGGATCTGTAACGCCACCAGGCAGATACTAGT
GTGTTGGCCGCTCTGCTGGCTAACAGAGTGCTTCCATTGACACAGTGGTATGCTTCCCT
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AATATGTCCAAGCTCTATTGGAGATTGATTGCTCTGCTGTTAGTTAGTTACTCGAACATC
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GACTAATTCAACCAGTAGACGAAACTAAATTCAAGGTTGAATGTCAAGTGGGAGCTTAT
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AGGAGAAGGGAGAGTGTCATGACAGAACATTCTGCACTAAACTACTTATCCCATTCAATTG
ATAAGGTTGACAAGGCTCTATACTGATGACACAATAAAACTACTTGAACAAATCTCAAGAGA

	AGAGTTGAAGATCTGAAACAAAGTGAATGCAGTGAAAGAAAAACACATAAAAAGTCTCAA GACATGGCAGAGAGGACATCCGACAACACTACGGAAACAACAAAGATGGTGTCAAGAGAAA AGCCAATGAATCTGATGAAGGGATCAGACAAAATTCTAAGAACTCTACCAAACATCAATC AGCCTAACATCGAGAAGGATTTTAATTGAGTTAAGATGCCATGGAAGGAATGCATATTACT CGAGATCATAGATTGCTGAGTAGTCTCAGACTAGATAACACATTGGTTGAGTCCTCTACAA CTAACAACTTCTTCTGTTACCATCAAAGCAAAGATCAATAGATTGAGCAGTCTATCAGCA GGAATGATCAAGCAGGTGCTACAGAGAGTCTAATGAAAGCTG <i>FtT8</i> ATGGCGGCACCACCGCCAGGCAACGGCGCTGCAGACGATGTTGAGTCGGCGGTTCAA GCCGTTCACTGGACCTACAGTCTCTGGCAATTCTGCCCGAGCAAGGGGTTCTAGTGT GGTCAGACGGATACTACAATGGAGCAATAAGACTCGGAAACGGTCCAGCCGATGGAGG TGAGTGGCGAGGAAGCTCCTTGCAACGCAGCCAGCAACTGCGCAGGTTACGACTCTCT CTCAGCCGGAGACACTAACCAACCGCAAGGCAGCTCTGCCGCTCTCACCGGAGGA CTTAACGGAGACCGAGTGGTTTACCTTATGTGTGTCCTCTCTTCCCTGGTGTGG GTTACCCGTAAGGCATACGTAAAACGACAACATGTATGGCTAACGGCGCACACGAGGTT GATAGCAAAGTCTTCTCGAGCTATTCTGCTAAGAGCGCTGGGTCAGACGGTTGTG TATTCTCTGTTGGATGGAGTGCTGGAGTTGGCTACTGAGAGGTTGCCGGAGGACATAT CTGTTGTCCTCGCAAGACGTTCTCGTTGACCACCCCTCACCACCTCACCGCCTCC ACCGCCCAAACCGCGCTATCTGAGCAITCCACCTCCAACCCAGCTGCCCTCATCCTCCGAC CACCCCTGCCACCCGCTTCCACTCTCCCCCTATCCCAGCTGCCCTCATGTATCCTGCCACTGAT CCTGCGACCACCTCCAATATGCACCGAGTCAACGAGGAGGCCAGGATGACGATGAAGAA GACGACAACGAATCGGATTCAAGAGCGGAAACGGCAGAAATAGCGATCCATGTCGGGA GCAGGGCAACAAAACCGCAAAATCCGGCTCAGTTGGAGCTGGCGCTGGCAAACACG GCGACTGCTGAGCCCAGTGAGCTAATGCAGCTTGAGATGTCAGAGGATATCCGCTCGGCT CACCGGAAGATGCCCTCAACACATGGATCCCATTCCGGCAGGGTGCCTGGTAGCCGG AATTACTATCCGGCAAACCGGATTGTGGGTCAACAGAGAAGGGCCACTGTTCAGCAGG GCTGAGTCATCTAGGCGTTGGCCGGTCATACAACATGATTGTCATCAACACCCACCTCT TCCACCGCCGCAACCACCGCTTCCCTCAGGTACCAACCCATTGGAAGAATGCCAGAG GACACACACTCTCAAACAGTCTCAACCATTCTACAATACCAGGCCAGGTGGTAGCG AGCCCACCCCAACCGACCCAGCTACCTCAGCCTAACACCCACACTCCG CCTCGCAAATGGCCGCTCGATCCGACCACCAAGTCCACATCCCAGAAAGAGCTCAACTC CCAATGGCTCTCAAATACATCCTATTCAACGCTCCATTCCACACCAGTAAATCCAACG ACGAAAACTCACCTAAAAGCCGAGAGCCTGGGCTGACCAGTCTCGCTCCAGTCA AGGGCACCCGCAAGACGAGCTCAGCGCTAACATGTCCTAGCTGAACGAAGGCCTCGAG AGAAGCTCAACGAGAGGTTCATACTAAGGCTGGTCCCTTGTAAACGAAAATGGAT AAAGCTCGATTAGGTGATACGATCGAGTACGTGAAGCAACTCGTAGAAAAATACAAG ACTTGGAAACGCGCGAGGACAACGGAGACCGAGCATA CGCTTGTGACGCTGCTA AGTCAAACAACTCAAGCGGGCTCACAGTGTCCGAGCGGGCTGGGCTGGACTCGGGCTGA GCGTGGATAAGAGGAAGATTAGGGTGGAGGGAGTAGTGGAGGTGCTAAGGCTAAGA TGATTGAGTCATACCGCCACCACTCCACCACTCTCAGGAGACATGTTACAGGGTGTG ATAATCGAGTGTGATGTTAATAGAGCTGACTGTCCGTACAGAGAAGGGTTGCTTCTG TGTGATGCTTGTGCTCAGGGAGTTGCGCATCGAGGTGACCGCAGTTCAATCTTCTTGAATA ATAATGGCTTCTCGTAGCTGAAATGAGAGCTAAGGTGAAGGAGAATGAAAATGTGAAGAA AGCGAGTATTGTTGAAGTGAAGAGAGCAATAAATCAGATAGTTCCGCACTCTGATGACTTCT AG <i>FtTG1</i> ATGGAGAATTGACTCAGGAATCACACCTCCGGCATGAGAATCTGGTGACGTACGAGTCCC
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CGTACCCCTCTGTACGCTATGTCGTTGCCAGCGGCGGACACTCCAGCGTCGGGCGGCCG
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 CCAACCAAGCTCATGTTCGTCCAATCCTCCCACCTCTTCTTCGGCTCTCCTAGCCTCC
 TCCGCTGACTTCCTCCGCCTCTACAGCCTCCGTAGCGGGCGGAAGCAGTCGATCAAGTCG
 CCGTCCTCAATAACTCAAATCCAGCGAGTTCTGCGCCCCCTCACCTCCTCGACTGGAAC
 GACCTCGTCCGTCGTATCGGGACTCAAGCATCGACACAACCTGCACGATCTGGGATAT
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 CTCCGTGACAAGGAGCATTCCACCATCATCTACGAGTCTCCGGAGCCGGACACCGCGCTTC
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 AGATGACGCCAGGCACTCATCTGGGAGCTCCTACCGTGGCTGGCCCGCTGGAATCGAT
 CCTCTATCTGTTACTCTGCTGCCTCCGAGATTAATCAGTTGCAGTGGTCTGCAACGCAGCC
 TGACTGGATTCCATCGCCTTGCCAATAAATTGCAGATGCTGAAAGTTAA

Table S4. Sequences of all primers used in this study

Primer name	Forward primer (5'→3')	Reverse primer (5'→3')
<i>FtMYB8</i>	ATGAGGAAGCCGTGTTGCGAGA	TCATCTGAATAGGTTAAGAGTAGGA
<i>PFtMYB8</i>	TAGGAAGGTATGACAGTTGATTG	TGCTTGGACCAAGCTCCCTTG
<i>PBG-FtMYB8</i>	TGACTGTATGCCCGAATTGAG	TAGCTTGGCTGCAGGTCGACTCATCT
	GAAGCCGTGTTGCGA	GAATAGGTTAAGAGTAG
<i>PYFP-FtMYB8</i>	GACGAGCTCGGTACCATGAGGAAG	GCTCACCATGTCGACTCTGAATAGGTT
	CCGTGTTGCGAG	AAGAGTAGG
<i>PBI-PFtMYB8</i>	TGATTACGCCAAGCTTAGGAAGG	ATCCTCTAGAGTCGACTCGCGTTATCG
	TATGACAGTTGATTG	AGTTTGATCCGGC
<i>PGAD-FtMYB8</i>	TGAATTCCACCCGGGT	GAGCTCGATGGATCC
	ATGAGGAAGCCGTGTTGCGAGA	TCATCTGAATAGGTTAAGAGTAG
<i>PGBK-AtTT8</i>	ATGGAGGCCGAATTGATGAA	CCGCTGCAGGTCGACCTATAGATTAGT
	TCAAGTATTATTC	ATCATGTATT
<i>PGBK-AtGL3</i>	ATGGAGGCCGAATTGATGGCTACC	CCGCTGCAGGTCGACTAACAGATCC
	GGACAAAACAG	ATGCAACCC
<i>PGBK-AtEGL3</i>	ATGGAGGCCGAATTGATGGCAACC	CCGCTGCAGGTCGACTTAACATATCCA
	GGAGAAAACAG	TGCAACCC
<i>PGBK-AtTTG1</i>	ATGGAGGCCGAATTGATAATT	CCGCTGCAGGTCGACTCAAACCTAA

	CAGCTCCAGA	GGAGCTGCA
<i>PGBK-FtTT8</i>	ATGGAGGCCGAATTCATGGCGGA	CCGCTGCAGGTCGACCTAGAAGTCAT
	CCACCGCCAGG	CAGAGTGCG
<i>PGBK-FtGL3</i>	ATGGAGGCCGAATTCATGGAGAAA	CCGCTGCAGGTCGACTCAACTTCTTA
	GTTTCACAAAATC	TCACGACTCTT
<i>PGBK-FtEGL3</i>	ATGGAGGCCGAATTCATGGAAACT	CCGCTGCAGGTCGACTCAAGCTTCA
	GGGCTCCAAAAA	TTAGAACTCTC
<i>PGBK-FtTTG1</i>	ATGGAGGCCGAATTCATGGAGAAT	CCGCTGCAGGTCGACTTAAACTTCA
	TCGACTCAGGA	GCATCTGCA
<i>FtH3</i>	AATTCTGCAAGTACCAGAAG	CCAACAAGGTATGCCTCAGC
<i>qFtMYB8</i>	TTGATTGCGGGGAGGTTACC	TCGGTTATCTGCGAGACGTG
<i>qFtPinG0505906200.01</i>	GCGTTCTATTCTAAAGCTGCC	CTTCCCAGCAATCAAAGACCA
<i>qFtPinG0606379100.01</i>	AAGCATGGAGAGGGGTGTTG	TCCGTTCTCCTGGTAGCCT
<i>qFtPinG0100390100.01</i>	TCACAAACTCCTCGGGCTCA	TGGCATGGCAATGGTTAGATC
<i>AtActin2</i>	CTGGAATGGTGAAGGCTGGTT	CGATTGGATACTTCAGAGTGAGGAT
<i>Ntβ-actin</i>	TATCCAGAAAGAGTCAACCCGTCA	TAGACAAAGCACATCACGACCACAA
	CCT	CC
<i>GUS</i>	ATGCGGACTTACGTGGCAAAGGAT	GCCGACAGCAGCAGTTCATCAATCA
	TCGA	CC
<i>NtCHS</i>	ACAAGACATAGTGGTGGTTGAAGT	GAGCCCGAGTAGCTTAGTGAGTTGGT
	GCC	AG
<i>NtCHI</i>	GTGCTCTCCTTTCTCGCCGC	ATTTCCTGCCACCTCTTGAGTATTG
<i>NtF3'H</i>	GGTGGTTGTGGCGTCTGCGTCG	AAGCCTGGCAGAGAAAAGATGAAC
		AGA
<i>NtFLS</i>	ACAGGCAATAGCGTCAATAACAA	GCTAGCATCCGATATGAGTTCACTA
	AATG	CA
<i>NtDFR</i>	GCTAAAGCAAACACAGTGAAGAG	CATCCATCCTGTCATCTTCTTAGCAT
	GC	A
<i>NtANS</i>	AGTATGCTAATGACCAACCCTCTG	TTGTAACCCAGGCACCATATTGTG
<i>AtCHS</i>	ACGGACATTGAGGGAGTTGG	AGGGTGGCTATCCAGAAGAGG

<i>AtCHI</i>	GCGGTTCTGGAATCTATCATCG	TCGTCCCTGTTCTTCATCATTAGC
<i>AtF3'H</i>	TCGTGGTCGCCGCTTCTAA	ATCGGTGTCCGTAAGGTGCA
<i>AtFLS</i>	ACCGTTGCTTCAGGATTACAGT TAC	AAATGATCACCGATTTTTCCGTG
<i>AtDFR</i>	GCCAAACGCCAAGACGCTA	CATTCACTGTCGGCTTATCACTTC
<i>AtANS</i>	AGGTTAGGATTCTTGGGCTGTG	CCGTGGAGGAAACTTAGCCG
<i>AtBAN</i>	GCACGGGAAACTTAGCCTCT	GATCGGAGTTGCGACATGGA
<i>AtTT12</i>	TGGTACTCGGGTCCAATCCT	CCAAGCAAGCCGAAATCCAG
<i>AtTT19</i>	CATCTCTCGTCAGCCATTGGT	CGTCACATTCTCGCTAACCT
<i>AtAHA10</i>	CCGAGGATTGGACAAGCCA	GACCTAGACTTGACTATTAGC