

Supplementary Table S1. Gene-specific primer sequences used in qRT-PCR

Locus name	Name	Primer name	Primer sequence (5'→3')	Encoded protein	Product size (bp)
<i>Glyma.01G014800</i>	GmMYB4	<i>Glyma.01G014800_qRT_Fw</i> <i>Glyma.01G014800_qRT_Rv</i>	CCAGCACCATCATCTCCCTC AGCCAGTGTGGTGGTGGAA	MYB TF	71
<i>Glyma.03G123400</i>	GmMYB77	<i>Glyma.03G123400_qRT_Fw</i> <i>Glyma.03G123400_qRT_Rv</i>	AATTGGCGGTTTCATGGTGC ATCCAGCCATGACCAATCCC	MYB TF	62
<i>Glyma.04G042300</i>	GmMYB102	<i>Glyma.04G042300_qRT_Fw</i> <i>Glyma.04G042300_qRT_Rv</i>	GAAGACGAGGCGATCCTGAA TTGACTACCCGAAACGGTGG	MYB TF	188
<i>Glyma.05G032200</i>	GmMYB176	<i>Glyma.05G032200_qRT_Fw</i> <i>Glyma.05G032200_qRT_Rv</i>	GCCAGCCATGCTCAGAAGTA AGTTTCAGCAGGGAACACGG	MYB TF	180
<i>Glyma.05G051700</i>	GmMYB128	<i>Glyma.05G051700_qRT_Fw</i> <i>Glyma.05G051700_qRT_Rv</i>	AGCTGCAGCATCTTCTCAGG CCAGGTTGTGGCAAATGCTC	MYB TF	60
<i>Glyma.07G132400</i>	GmMYB202	<i>Glyma.07G132400_qRT_Fw</i> <i>Glyma.07G132400_qRT_Rv</i>	TGGAATCTGGTGTCTCAGCG CTTCCACTTGTGCGGTGTG	MYB TF	168
<i>Glyma.09G017300</i>	GmMYB250	<i>Glyma.09G017300_qRT_Fw</i> <i>Glyma.09G017300_qRT_Rv</i>	TCAGGACTTGCATGAACGCT ATCTTTGCATCCTTCGCCCA	MYB TF	187
<i>Glyma.10G010300</i>	GmMYB280	<i>Glyma.10G010300_qRT_Fw</i> <i>Glyma.10G010300_qRT_Rv</i>	GCGGCGTGGAAATATCACAC CAGCGAGAGTGAAGGTCGAG	MYB TF	60
<i>Glyma.13G294300</i>	GmMYB399	<i>Glyma.13G294300_qRT_Fw</i> <i>Glyma.13G294300_qRT_Rv</i>	CCCTCCCTCTGTGCTTGAG CCATCACACCTCGCGTAAGA	MYB TF	69
<i>Glyma.14G086500</i>	GmMYB415	<i>Glyma.14G086500_qRT_Fw</i> <i>Glyma.14G086500_qRT_Rv</i>	CCAAGTTCGGCAACAAGTGG GTCACTAACGGCGGAGGATT	MYB TF	116
<i>Glyma.16G093600</i>	GmMYB467	<i>Glyma.16G093600_qRT_Fw</i> <i>Glyma.16G093600_qRT_Rv</i>	AAAGAAGCCCCAGCCCATAC CCGCTTAAGGGCATAACCACT	MYB TF	88
<i>Glyma.17G237900</i>	GmMYB502	<i>Glyma.17G237900_qRT_Fw</i> <i>Glyma.17G237900_qRT_Rv</i>	TCCGATTTGAGCGATCCGAG GATCGCAAGCAGAAGAAGCG	MYB TF	100
<i>Glyma.18G181300</i>	GmMYB522	<i>Glyma.18G181300_qRT_Fw</i> <i>Glyma.18G181300_qRT_Rv</i>	TGTCTGAGTTGGTGGAGTGC CCTCCTTCTTATGTCCGGCC	MYB TF	72
<i>Glyma.03G181700</i>	GmPAL1	<i>Glyma.03G181700_qRT_Fw</i> <i>Glyma.03G181700_qRT_Rv</i>	AGCAACACAACCAGGATGTCAA CAATTGCTTGGCAAAGTGCA	Phenylalanine ammonia-lyase 1	120
<i>Glyma.02G236500</i>	GmC4H	<i>Glyma.02G236500_qRT_Fw</i> <i>Glyma.02G236500_qRT_Rv</i>	AGGCGAGATCAACGAAGACAAC GTTACAAGCTCAGCAATGCC	Cinnamic acid 4-hydroxylase	109
<i>Glyma.01G232400</i>	Gm4CL	<i>Glyma.01G232400_qRT_Fw</i> <i>Glyma.01G232400_qRT_Rv</i>	AGGCAATGTACGTGGACAAGCT TCCGAGAGGACAGAGAAGTGG	4-Coumarate:CoA ligase	118
<i>Glyma.08G109400</i>	GmCHS1	<i>Glyma.08G109400_qRT_Fw</i> <i>Glyma.08G109400_qRT_Rv</i>	AAGCGCATGTGTGATAAGTCGA TTGCATCCAACGAAGGTGC	Chalcone synthase 1	112
<i>Glyma.05G153200</i>	GmCHS2	<i>Glyma.05G153200_qRT_Fw</i> <i>Glyma.05G153200_qRT_Rv</i>	TATGGCACCTTATTGGATGC GCTGGTGGTGCAAAAAATGAG	Chalcone synthase 2	1142

Locus name	Name	Primer name	Primer sequence (5'→3')	Encoded protein	Product size (bp)
<i>Glyma.08G109300</i>	GmCHS3	<i>Glyma.08G109300_qRT_Fw</i> <i>Glyma.08G109300_qRT_Rv</i>	GAGATCCGTAATGCACAACGTG CTTTGAGCTCGGTCATGTGCT	Chalcone synthase 3	145
<i>Glyma.08G110700</i>	GmCHS4	<i>Glyma.08G110700_qRT_Fw</i> <i>Glyma.08G110700_qRT_Rv</i>	CCTTCCAAGCCACTTTGCA CTGGAGCAAAGGATGAAAAGTGA	Chalcone synthase 4	81
<i>Glyma.08G109200</i>	GmCHS5	<i>Glyma.08G109200_qRT_Fw</i> <i>Glyma.08G109200_qRT_Rv</i>	CACTTTGCCACATTCATTCC TGTGAATGAACTAATGAAGCTATAGC	Chalcone synthase 5	114
<i>Glyma.09G075200</i>	GmCHS6	<i>Glyma.09G075200_qRT_Fw</i> <i>Glyma.09G075200_qRT_Rv</i>	ACCAACAGTGACCACATGAACG GGCACAAACACTTGGATTCTCC	Chalcone synthase 6	126
<i>Glyma.01G228700</i>	GmCHS7	<i>Glyma.01G228700_qRT_Fw</i> <i>Glyma.01G228700_qRT_Rv</i>	AACCCACCAAACCGTGTTGAT CTTGTCACACATGCGCTGAAAT	Chalcone synthase 7	111
<i>Glyma.11G011500</i>	GmCHS8	<i>Glyma.11G011500_qRT_Fw</i> <i>Glyma.11G011500_qRT_Rv</i>	ATGGAGCTGCTGCTGTCATTG CCTCACGAAGGTGTCCATCAA	Chalcone synthase 8	132
<i>Glyma.14G005700</i>	GmCHR	<i>Glyma.14G005700_qRT_Fw</i> <i>Glyma.14G005700_qRT_Rv</i>	CAAAGCCATTGGAGTCAGCAA CCATGCAAGGTTTCATCTCCACT	Chalcone reductase	106
<i>Glyma.20G241500</i>	GmCHI1A	<i>Glyma.20G241500_qRT_Fw</i> <i>Glyma.20G241500_qRT_Rv</i>	GGCGCTGAATACTCAAAGAAGG AGAGGCACCAGGTGCAAAAATT	Chalcone isomerase 1A Type II	141
<i>Glyma.20G241500</i>	GmCHI1B	<i>Glyma.20G241500_qRT_Fw</i> <i>Glyma.20G241500_qRT_Rv</i>	AGCTGAATTGCTCGACTCCCT CAGATTGCATATGTGCCACACA	Chalcone isomerase 1B Type II	149
<i>Glyma.07G202300</i>	GmIFS1	<i>Glyma.07G202300_qRT_Fw</i> <i>Glyma.07G202300_qRT_Rv</i>	AGAATCCCGTCCCGAGAGGTT TGCCATTCTGAAGTAGCCAA	Isoflavone synthase 1	148
<i>Glyma.13G173500</i>	GmIFS2	<i>Glyma.13G173500_qRT_Fw</i> <i>Glyma.13G173500_qRT_Rv</i>	AATGTGCCCTGGAGTCAATCTG GGCGTACCACCCTTCAATAT	Isoflavone synthase 2	121
<i>Glyma.01G172600</i>	GmIFR	<i>Glyma.01G172600_qRT_Fw</i> <i>Glyma.01G172600_qRT_Rv</i>	AGATGGAAATGTGAAAGGAGCG TGTGCACGGCTTTGTCAAG	Isoflavone reductase	101
<i>Glyma.02G048400</i>	GmF3H	<i>Glyma.02G048400_qRT_Fw</i> <i>Glyma.02G048400_qRT_Rv</i>	TTACCTGGCCCAGGAGAAAAC ATTCCGGCAAGAGAAATCACTG	Flavanone 3-hydroxylase	117
<i>Glyma.14G072700</i>	GmDFR1	<i>Glyma.14G072700_qRT_Fw</i> <i>Glyma.14G072700_qRT_Rv</i>	TTGTTGTCGGTCCCTTTCTGA GTGGACGAATTGACCTTGCTTT	Dihydroflavonol-4-reductase	116
<i>Glyma.17G252200</i>	GmDFR2	<i>Glyma.17G252200_qRT_Fw</i> <i>Glyma.17G252200_qRT_Rv</i>	CCATGGATTTGACTCCAAGGA CTTCGGACAGTTTGGCCCTTC	Dihydroflavonol-4-reductase 2	106
<i>Glyma.12G051100</i>	GmF-box	<i>Glyma.12G051100_qRT_Fw</i> <i>Glyma.12G051100_qRT_Rv</i>	AGATAGGGAAATGGTGCAGGT CTAATGGCAATTGCAGCTCTC	F-box protein family	92
<i>Glyma.19G052400</i>	GmELFa	<i>Glyma.19G052400_qRT_Fw</i> <i>Glyma.19G052400_qRT_Rv</i>	GACCTTCTCGTTTCTCGCA CGAACCTCTCAATCACACGC	Eukaryotic elongation factor 1-alpha	195
<i>Glyma.19G147900</i>	GmACTIN	<i>Glyma.19G147900_qRT_Fw</i> <i>Glyma.19G147900_qRT_Rv</i>	CTTCCCTCAGCACCTTCCAA GGTCCAGCTTTCACACTCCAT	Actin	119

Locus names are taken from the *Glycine max* genome assembly Wm82.a2.v1 annotated database (<http://phytozome.jgi.doe.gov/>) version 11.0.

Supplementary Table S2. Primers used for the construction of effector and reporter constructs

Locus name	Name	Primer name	Primer sequence (5'→3')	Purpose	Product size (bp)
<i>Glyma.01G014800</i>	GmMYB4	Glyma.01G014800_Fw	<u>CACCATGGAGCTATTCCCAGCACAAACCAGACTTG</u>	Gene cloning	1221
		Glyma.01G014800_Rv	TTAAAGTGGCTGGCCCAAGCTGAATTCCAA		
<i>Glyma.03G123400</i>	GmMYB77	Glyma.03G123400_Fw	<u>CACCATGAGGGAAGAGGATTCCAATTGGTTTTTCG</u>	Gene cloning	969
		Glyma.03G123400_Rv	TCACAACCAACCATGCCAATCAGATACGCC		
<i>Glyma.04G042300</i>	GmMYB102	Glyma.04G042300_Fw	<u>CACCATGGATCGGATAAAAAGGGCCATGGAGTCCT</u>	Gene cloning	828
		Glyma.04G042300_Rv	TTATTCAACCCTACCAATCCCATCCTCTC		
<i>Glyma.05G032200</i>	GmMYB176	Glyma05g032200_Fw	<u>CACCGACGATGTCTCGCGCTC</u>	Gene cloning	858
		Glyma05g032200_Rv	TGCTTGAGAATATGGTCCTTGC		
<i>Glyma.05G051700</i>	GmMYB128	Glyma.05G051700_Fw	<u>CACCATGGGAAGGCAACCCTGCTGTGACAAACTT</u>	Gene cloning	864
		Glyma.05G051700_Rv	CTAATGCCCCCTCTTCTTTCATTCTACAGT		
<i>Glyma.07G132400</i>	GmMYB202	Glyma.07G132400_Fw	<u>CACCATGAAGGATAGGCAACGTTGGAGAGCTGAA</u>	Gene cloning	1134
		Glyma.07G132400_Rv	CTATCTCCATTTGGTTCAGTGAGCCTTGA		
<i>Glyma.09G017300</i>	GmMYB250	Glyma.09G017300_Fw	<u>CACCATGTACCCGAGGCTCATACACCCCCACGAT</u>	Gene cloning	993
		Glyma.09G017300_Rv	CTACATGCCATACCTAGTTATTCCCTTGAGG		
<i>Glyma.10G010300</i>	GmMYB280	Glyma.10G010300_Fw	<u>CACCATGGATGTTAAGAAAGGTGGGTCTGTAGTA</u>	Gene cloning	759
		Glyma.10G010300_Rv	TTATTTTCATTTGGAGGTCATAAGAAAGCTG		
<i>Glyma.13G294300</i>	GmMYB399	Glyma.13G294300_Fw	<u>CACCATGTTGGCGGTGTACCTTTGAGGAGCACACA</u>	Gene cloning	1359
		Glyma.13G294300_Rv	TCAAGCACAAAGAGGGAGGGATTTTGGGAAT		
<i>Glyma.14G086500</i>	GmMYB415	Glyma.14G086500_Fw	<u>CACCATGGTATCATCATCGGGAAAAAGCAGAGAA</u>	Gene cloning	870
		Glyma.14G086500_Rv	TCACTCGATGTTGCTAATTCCCATGCGCTT		
<i>Glyma.16G093600</i>	GmMYB467	Glyma.16G093600_Fw	<u>CACCATGGCGACCCCCCAAACGACGCCGCATCG</u>	Gene cloning	963
		Glyma.16G093600_Rv	TCAGTTTTGTTGAGTAATCTTGATCCTCTT		
<i>Glyma.17G237900</i>	GmMYB502	Glyma.17G237900_Fw	<u>CACCATGGATCGGGTGAAGGTCCATGGAGCCCA</u>	Gene cloning	855
		Glyma.17G237900_Rv	TCACTCGATGTTGCTAATTCCCATGCGCTT		
<i>Glyma.18G181300</i>	GmMYB522	Glyma.18G181300_Fw	<u>CACCATGAAGGATAGGCAACGTTGGAGAGCTGAA</u>	Gene cloning	1122
		Glyma.18G181300_Rv	CTATCTCCATTTGGTTCAGTGAGCCTTGA		
<i>Glyma.11G011500</i>	GmCHS8pro	GmCHS8pro_HindIII_Fw	CCCC <u>AAGCTT</u> TGAGCAAGTATAACCAACCAT	Transient assay	1662
<i>Glyma.07G202300</i>	GmIFS1pro	GmCHS8pro_BamHI_Rv	CTGAGGATCCCTTTCCTTCAAATTAAGTGAT	Transient assay	1740
		GmIFS1pro_PstI_Fw	AATCTGCAGTGACTTTGCTTGGGTGTCAA		
<i>Glyma.13G173500</i>	GmIFS2pro	GmIFS1pro_BamHI_Rv	AATGGATCCGATCCTTGGCCTGAGGAAACA	Transient assay	1547
		GmIFS2pro_PstI_Fw	AATCTGCAGTGTACAAAGGGGAACATTTGC		
		GmIFS2pro_BamHI_Rv	AATGGATCCGTGTTCTCGTCCTTGTTT		

Locus names are taken from the *Glycine max* genome assembly Wm82.a2.v1 annotated database (<http://phytozome.jgi.doe.gov/>) version 11.0. Underlined 4 base-pair sequences (CACC) were added for directional cloning of MYB at the 5' end of the forward primer of pENTER/D-TOPO entry vector. Underlined 6-base-pair sequences are the recognition sites for restriction enzymes used in plasmid construction.