

Supplementary Tables

Table S1. List of primers used in this study

A. Primers for Real-Time PCR/ddPCR analyses

Genes	Forward primers	Reverse primers
<i>MtPAL1</i>	5'- TTGATGACCCTTGTATGGAC -3'	5'- CTTGATTTTGTTAGGACTTGC -3'
<i>MtPAL2</i>	5'- ATAGATGACAGAGAAGAAATCG -3'	5'- GGAATTTTCAGAATTTCCCTTC -3'
<i>MtPAL3</i>	5'- TGGTGTCAATGGTGAGTTGC -3'	5'- CCACCTCTTTAGGCAAAAGGG -3'
<i>MtPAL4</i>	5'- CTAAGAGAACACTCACAACC -3'	5'- ACTTCCTTTGGCAAGATAGC -3'
<i>MtPAL5</i>	5'- TCCTCTTCTTGAATGCTTGG -3'	5'- CACTAAAAATTCCGGCAAAC -3'
<i>MtPAL6</i>	5'- TCCTCTTCTTGAATGCTTGG -3'	5'- GGACACACATTAGCAATACC -3'
<i>MtIFS1</i>	5'- AGTACCTGGTCAACATGGAG -3'	5'- ACAAAGTAGGAGAGACAAGC -3'
<i>MtIFS2</i>	5'- GGTGAAGAGAAAATGCACCG -3'	5'- TGAAACATCACTCATGGACC -3'
<i>MtIFS3</i>	5'- ATCCAGTGCTTTGATCTGC -3'	5'- CAACCATTGCAACATTTTGTG -3'
<i>MtABCG10</i>	5'- AACTACTGTTATGTCGACCG -3'	5'- CAACAGCGAAAATAAAGGCA -3'
<i>Mtβ-Actin</i>	5'- TTCTCTCAGTACTTCCAGC -3'	5'- AAGCATCACAATCACTCC -3'

B. EcoRI (atgaattc)/BamHI (taggatcc)/HindIII (actaagctt) tagged primers for promoters activity analyses - GUS (gene specific sequences underlined)

Genes	Forward primers	Reverse primers
<i>MtPAL4</i>	5'- atgaattc <u>CTAAATAAACTTCAATTATACGCACC</u> -3'	5'- taggatcc <u>AATTACGAATGCACGAATATTTTACC</u> -3'
<i>MtPAL5</i>	5'- atgaattc <u>ACATTGGTATATCTTGTTTAGTC</u> -3'	5'- taggatcc <u>ATCTTAATTGATAATAATTAATGTTCC</u> -3'
<i>MtPAL6</i>	5'- atgaattc <u>GG ATG TTG GTA ACA TGA G</u> -3'	5'- taggatcc <u>GATCTTATATTGATACTAATAG</u> -3'
<i>MtIFS1</i>	5'- atgaattc <u>AATGTGTAGTATTCTCATGG</u> -3'	5'- actaagctt <u>GGTGTATAGCTTCTTTGTAG</u> -3'
<i>MtIFS3</i>	5'- atgaattc <u>GAGAAATGATATTTGTACATC</u> -3'	5'- taggatcc <u>GGTGTATTGTAGTATATTTAC</u> -3'
<i>MtABCG10</i>	5'- atgaattc <u>GTGTCCTTGATTAACCTCACC</u> -3'	5'- taggatcc <u>TTTTTGTGCTGTTGTGAAAC</u> -3'

C. LIC_F adapter (tagttggaatgggttcgaa)/ LIC_R adapter (ttatggagttgggttcgaa) tagged primers for promoters activity analyses - NLS:GFP (gene specific sequences underlined)

Genes	Forward primers	Reverse primers
<i>MtPAL4</i>	5'- tagttggaatgggttcgaa <u>CTAAATAAACTTCAATTATACGCACC</u> -3'	5'- ttatggagttgggttcgaa <u>AATTACGAATGCACGAATATTTTACC</u> -3'
<i>MtPAL5</i>	5'- tagttggaatgggttcgaa <u>ACATTGGTATATCTTGTTTAGTC</u> -3'	5'- ttatggagttgggttcgaa <u>ATCTTAATTGATAATAATTAATGTTCC</u> -3'
<i>MtPAL6</i>	5'- tagttggaatgggttcgaa <u>GG ATG TTG GTA ACA TGA G</u> -3'	5'- ttatggagttgggttcgaa <u>GATCTTATATTGATACTAATAG</u> -3'
<i>MtIFS1</i>	5'- tagttggaatgggttcgaa <u>AATGTGTAGTATTCTCATGG</u> -3'	5'- ttatggagttgggttcgaa <u>GGTGTATAGCTTCTTTGTAG</u> -3'
<i>MtIFS3</i>	5'- tagttggaatgggttcgaa <u>GAGAAATGATATTTGTACATC</u> -3'	5'- ttatggagttgggttcgaa <u>GGTGTATTGTAGTATATTTAC</u> -3'
<i>MtABCG10</i>	5'- tagttggaatgggttcgaa <u>GTGTCCTTGATTAACCTCACC</u> -3'	5'- ttatggagttgggttcgaa <u>TTTTTGTGCTGTTGTGAAAC</u> -3'

D. Primers used for cloning of MtABCG10 genomic/cDNA hybrid; AscI (ggcggcc)/ PacI (ctacttaattaa) tagged primers (gene specific sequences underlined)

DNA fragment	Forward primers	Reverse primers
genomic part	5'- ATGGAGGGAACAGATATATACAG -3'	5'- GGGTCAGGCTTGATATTTGC -3'
cDNA part	5'- ATGCTATCCGAGCTTTCTAG -3'	5'- CTATCTCTTTTGGAAAGTTAAAGG -3'
hybrid	5'- ggcggcc <u>AATGGAGGGAACAGATATATACAG</u> -3'	5'- ctacttaattaa <u>CTATCTCTTTTGGAAAGTTAAAGG</u> -3'

Table S2. GenBank accession numbers for the *Medicago truncatula* sequences used in this study

PAL (L-phenylalanine ammonia - lyase)

Gene name	Loci	mRNA	Protein
<i>MtPAL1</i>	MTR_2g094960	XM_013609864	XP_013465318
<i>MtPAL2</i>	MTR_5g098720	XM_003618028	XP_003618076
<i>MtPAL3</i>	MTR_1g094780	XM_003591829	XP_003591877
<i>MtPAL4</i>	MTR_1g064090	XM_003590423	XP_003590471
<i>MtPAL5</i>	MTR_7g101395	XM_013594536	XP_013449990
<i>MtPAL6</i>	MTR_7g101425	XM_013594537	XP_013449991

IFS (isoflavone synthase)

Gene name	Loci	mRNA	Protein
<i>MtIFS1</i>	MTR_4g088195	XM_013601477	XP_013456931
<i>MtIFS2</i>	MTR_4g088170	XM_013601474	XP_013456928
<i>MtIFS3</i>	MTR_4g088160	XM_013601473	XP_013456927

Others

Gene name	Loci	mRNA	Protein
<i>MtABCG10</i>	MTR_2g102670	XM_003597771	XP_003597819
<i>Mtβ-Actin</i>	MTR_3g095530	XM_003602497	XP_003602545