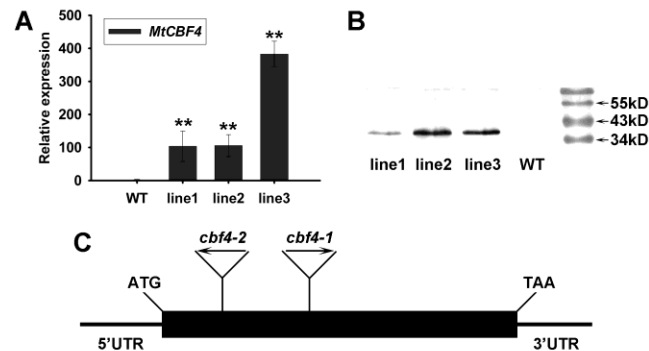
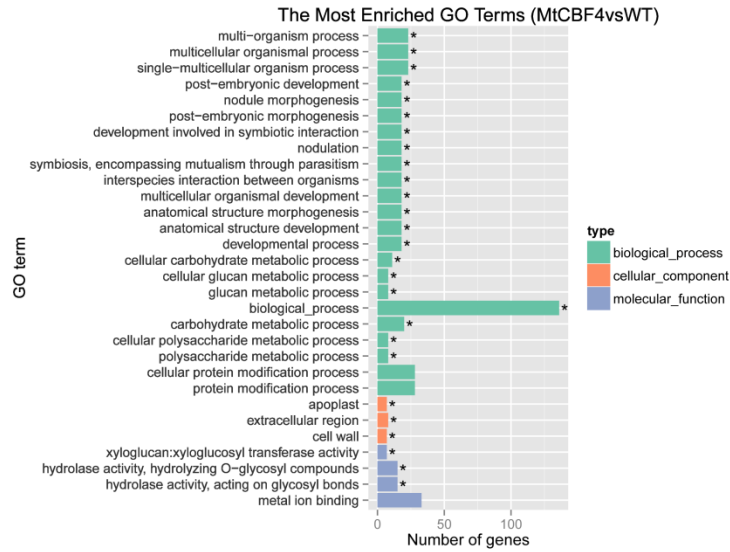


## SUPPLEMENTAL MATERIAL

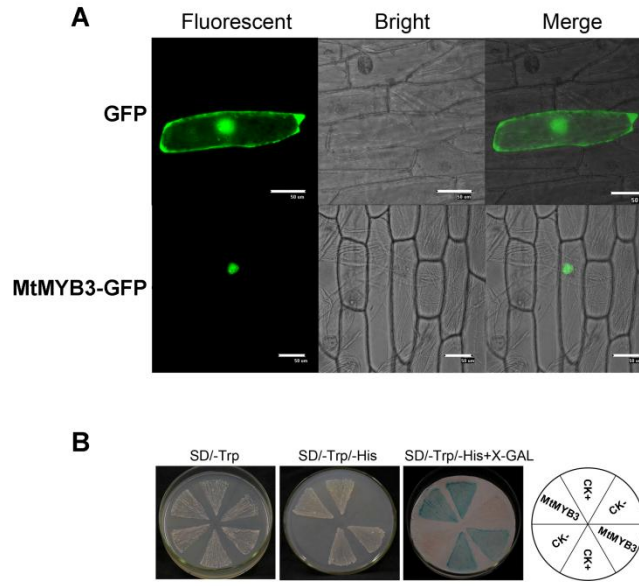
### Supplemental Figures



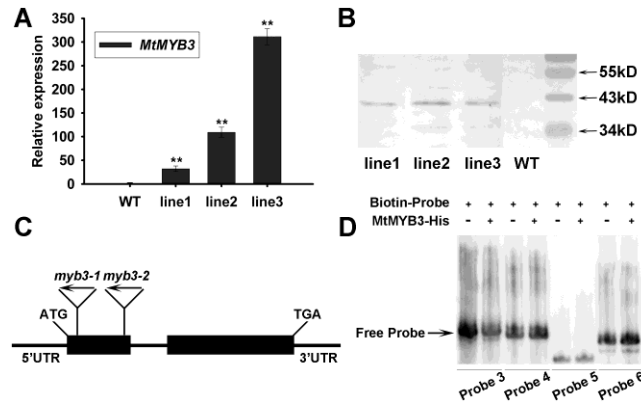
**Figure S1. qRT-PCR and western blot analysis of Pro35S:MtCBF4 transgenic *M. truncatula* plants.** (A) qRT-PCR analysis of *MtCBF4* expression in wild-type (WT) and Pro35S:MtCBF4:3xFLAG *M. truncatula* plants (T1 generation). The *MtActin* gene was used as a reference gene. Data represent the mean and SD for three independent replicates (Kruskal-Wallis non-parametric test, \*\* $P < 0.01$ , \* $P < 0.05$ ). (B) Western blot analysis of Pro35S:MtCBF4:3xFLAG transgenic *M. truncatula* plants (T1 generation). An anti-FLAG antibody was used. (C) The *Tnt1* insertion sites in the *MtCBF4* gene are indicated for *cbf4-1* and *cbf4-2* mutant alleles.



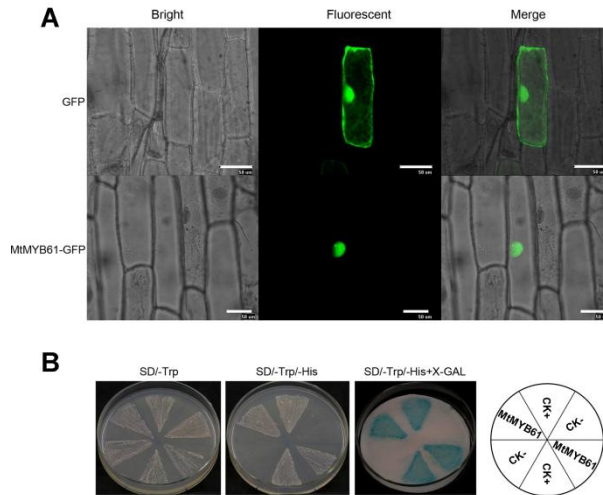
**Figure S2. Functional category enrichment analysis of differentially expressed genes based on GO terms.**



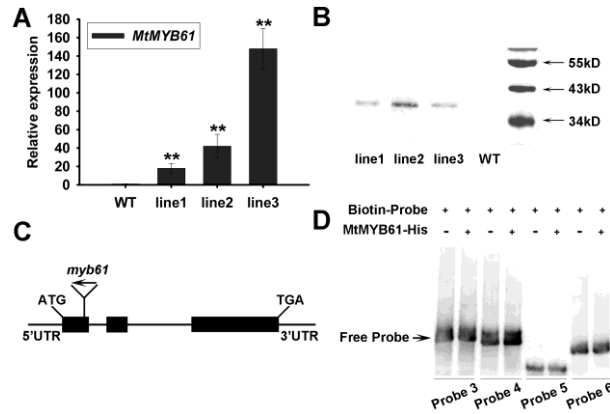
**Figure S3. Subcellular localization and transcriptional activation analysis of MtMYB3.** (A) Subcellular localization of MtMYB3. A Pro35S:MtMYB3:GFP construct was bombarded into onion epidermal cells with DNA-coated gold particles, and GFP expression was visualized after 16 h. Cells expressing GFP alone were used as control. Bars = 50  $\mu$ m. (B) Transcriptional activation analysis of MtMYB3 in yeast. Yeast cells transformed with pBD GAL4-MtMYB3 (MtMYB3), pBD GAL4 empty vector (CK-, negative control), and pGAL4 vector (CK+, positive control) were grown on a SD/-Trp medium, or on a SD/-Trp/-His selective medium with or without X-GAL.



**Figure S4. qRT-PCR and western blot analysis of Pro35S:MtMYB3 transgenic *M. truncatula* plants.** (A) qRT-PCR analysis of *MtMYB3* expression in wild-type (WT) and Pro35S:MtMYB3:3xFLAG *M. truncatula* plants (T1 generation). The *MtActin* gene was used as a reference gene. Data represent the mean and SD for three independent replicates (Kruskal-Wallis non-parametric test, \*\*P < 0.01, \*P < 0.05). (B) Western blot analysis of Pro35S:MtMYB3:3xFLAG transgenic *M. truncatula* plants (T1 generation). (C) The *Tnt1* insertion sites in the *MtMYB3* gene are indicated for *myb3-1* and *myb3-2* mutant alleles. (D) EMSA assay for MtMYB3 interaction with MYB *cis*-elements from the promoter of *MtCBF4* except probe 1 and 2 (shown in Fig. 4A), corresponding to probes 3 to 6.

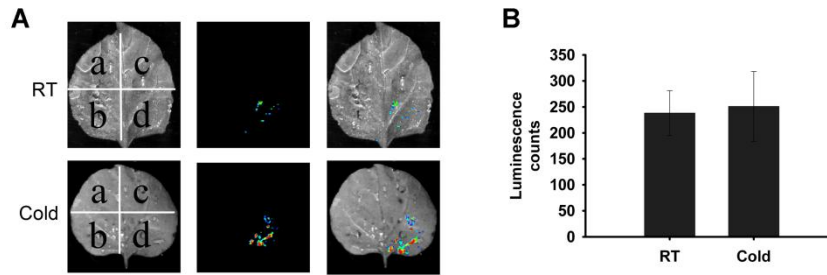


**Figure S5. Subcellular localization and transcriptional activation analysis of MtMYB61.** (A) Subcellular localization of MtMYB61-GFP. A Pro35S:MtMYB61:GFP construct was bombarded into onion epidermal cells with DNA-coated gold particles, and GFP expression was visualized after 16 h. Cells expressing GFP alone were used as control. Bars = 50  $\mu$ m. (B) Transcriptional activation analysis of MtMYB61 in yeast. Yeast cells transformed with pBD GAL4-MtMYB61 (MtMYB61), pBD GAL4 empty vector (CK-, negative control), and pGAL4 vector (CK+, positive control) were grown on a SD/-Trp medium, or on a SD/-Trp/-His selective medium with or without X-GAL.



**Figure S6. qRT-PCR and western blot analysis of Pro35S:MtMYB61 transgenic *M. truncatula* plants.** (A) qRT-PCR analysis of *MtMYB61* expression in wild type (WT) and Pro35S:MtMYB61:3xFLAG *M. truncatula* plants (T1 generation). The *MtActin* gene was used as a reference gene. Data represent the mean and SD for three independent replicates (Kruskal-Wallis non-parametric test, \*\* $P < 0.01$ , \* $P < 0.05$ ). (B) Western blot analysis of Pro35S:MtMYB61:3xFLAG transgenic *M. truncatula* plants (T1 generation). (C) The *Tnt1* insertion site in the *MtMYB61* gene is indicated for the *myb61* mutant allele. (D) EMSA assay for MtMYB61 interaction with MYB *cis*-elements from the promoter of *MtCBF4* except probe 1 and 2 (shown in Fig. 10A), corresponding to probes 3 to 6.





**Figure S8. Cold does not affect the interaction between MtMYB3 and MtMYB61. (A)**

Tobacco leaves were co-transformed with the vector cLUC and the control vector nLUC (1), MtMYB3:cLUC and nLUC (2), MtMYB61:nLUC and cLUC (3), or MtMYB61:nLUC and MtMYB3:cLUC (4). Leaves were maintained at 4°C for 2h (Cold) or at Room Temperature (RT) before imaging. (B) Quantification of the luciferase activity. The mean values and SD were calculated from the results of three replicated experiments. No significant difference between RT and Cold conditions was detected.



## Supplemental Table

### Supplemental Table 1. List of differentially expressed genes between WT and 35S:MtCBF4 transgenic plants.

Up-regulated genes in MtCBF4 overexpressing lines	
Gene ID	Annotation
AC233660_22	-/-
Medtr1g092630	-/-
Medtr2g014050	sp Q8SVY9 Y3G1_ENCCU Uncharacterized protein ECU03_1610 OS=Encephalitozoon cuniculi (strain GB-M1) GN=ECU03_1610 PE=1 SV=1//3.38195e-07
Medtr4g058610	-/-
Medtr4g115940	-/-
Medtr6g044390	sp Q9STX9 TIP51_ARATH Probable aquaporin TIP5-1 OS=Arabidopsis thaliana GN=TIP5-1 PE=2 SV=1//2.81001e-35
Medtr1g101600	sp Q9M0L0 DRE1A_ARATH Dehydration-responsive element-binding protein 1A OS=Arabidopsis thaliana GN=DREB1A PE=1 SV=2//1.39545e-59
Medtr4g035490	sp Q9C809 B3GT8_ARATH Probable beta-1,3-galactosyltransferase 8 OS=Arabidopsis thaliana GN=B3GALT8 PE=2 SV=1//0
Medtr1g071850	sp Q9S7C9 ESCA_ARATH Putative DNA-binding protein ESCAROLA OS=Arabidopsis thaliana GN=ESC PE=2 SV=1//4.82879e-09
Medtr8g005450	-/-
Medtr8g055900	-/-
Medtr7g109740	-/-
Medtr1g080340	sp Q8W595 SUVR4_ARATH Histone-lysine N-methyltransferase SUVR4 OS=Arabidopsis thaliana GN=SUVR4 PE=2 SV=2//7.73706e-18
Medtr4g078690	sp P98205 ALA2_ARATH Phospholipid-transporting ATPase 2 OS=Arabidopsis

thaliana GN=ALA2 PE=1 SV=1//2.14139e-10  
 Medtr7g111460 -//-  
 Medtr3g116870 -//-  
 Medtr1g080080 -//-  
 Medtr4g082900 -//-  
 Medtr7g098760 sp|Q76CU2|PDR1\_TOBAC Pleiotropic drug resistance protein 1 OS=Nicotiana  
 tabacum GN=PDR1 PE=2 SV=1//6.33562e-08  
 Medtr8g094120 -//-  
 Medtr8g036590 -//-  
 Medtr3g030400 -//-  
 Medtr3g085150 -//-  
 Medtr8g077530 -//-  
 Medtr5g054560 sp|P49690|RL23\_ARATH 60S ribosomal protein L23 OS=Arabidopsis thaliana  
 GN=RPL23A PE=2 SV=3//1.15195e-13  
 AC233112\_1016 -//-  
 Medtr4g012390 -//-  
 Medtr3g041540 sp|Q9FT70|RQL4B\_ARATH ATP-dependent DNA helicase Q-like 4B  
 OS=Arabidopsis thaliana GN=RECQL4B PE=2 SV=1//5.1528e-09  
 Medtr1g015480 sp|Q9SMY8|FBL15\_ARATH F-box/LRR-repeat protein 15 OS=Arabidopsis  
 thaliana GN=FBL15 PE=1 SV=2//0  
 Medtr2g086350 -//-  
 Medtr2g018710 -//-  
 Medtr5g040970 -//-  
 Medtr7g073430 sp|Q9LY00|WRK70\_ARATH Probable WRKY transcription factor 70  
 OS=Arabidopsis thaliana GN=WRKY70 PE=2 SV=1//2.06495e-10  
 Medtr7g093820 sp|P13240|DR206\_PEA Disease resistance response protein 206 OS=Pisum  
 sativum GN=PI206 PE=2 SV=2//7.96129e-10

Medtr5g093210 -//-

Medtr1g082310 sp|Q8RXC8|RBK2\_ARATH Receptor-like cytosolic serine/threonine-protein kinase RBK2 OS=Arabidopsis thaliana GN=RBK2 PE=1 SV=1//7.23689e-08

Medtr7g025130 -//-

Medtr2g008430 sp|Q9ZQI7|ALD1\_ARATH Aminotransferase ALD1 OS=Arabidopsis thaliana GN=ALD1 PE=2 SV=2//0

Medtr6g008650 sp|O49858|C82A3\_SOYBN Cytochrome P450 82A3 OS=Glycine max GN=CYP82A3 PE=2 SV=1//0

Medtr3g030540 sp|Q9SFB7|QRT2\_ARATH Polygalacturonase QRT2 OS=Arabidopsis thaliana GN=QRT2 PE=1 SV=2//9.67049e-132

AC233679\_12 -//-

Medtr3g100270 sp|O95239|KIF4A\_HUMAN Chromosome-associated kinesin KIF4A OS=Homo sapiens GN=KIF4A PE=1 SV=3//2.11929e-09

Medtr4g082880 -//-

Medtr1g043930 sp|Q9SX31|PERK9\_ARATH Proline-rich receptor-like protein kinase PERK9 OS=Arabidopsis thaliana GN=PERK9 PE=2 SV=1//1.73124e-15

AC235674\_16 sp|Q04980|LTI65\_ARATH Low-temperature-induced 65 kDa protein OS=Arabidopsis thaliana GN=LTI65 PE=2 SV=2//1.17211e-08

Medtr4g128580 sp|Q38910|XTH23\_ARATH Probable xyloglucan endotransglucosylase/hydrolase protein 23 OS=Arabidopsis thaliana GN=XTH23 PE=2 SV=1//1.38281e-141

Medtr1g075030 -//-

Medtr5g047070 sp|Q9SCZ4|FERON\_ARATH Receptor-like protein kinase FERONIA OS=Arabidopsis thaliana GN=FER PE=1 SV=1//1.01907e-160

Medtr2g009840 sp|Q6Z6W2|MAD57\_ORYSJ MADS-box transcription factor 57 OS=Oryza sativa subsp. japonica GN=MADS57 PE=2 SV=2//8.23177e-32

Medtr8g014760 sp|C0LGD6|Y1570\_ARATH Probable LRR receptor-like serine/threonine-protein

kinase At1g05700 OS=Arabidopsis thaliana GN=At1g05700 PE=2 SV=1//0

Medtr3g086440 sp|Q94BZ1|ZIFL1\_ARATH Protein ZINC INDUCED FACILITATOR-LIKE 1  
OS=Arabidopsis thaliana GN=ZIFL1 PE=2 SV=1//7.17673e-169

Medtr4g054920 sp|O81117|C94A1\_VICSA Cytochrome P450 94A1 OS=Vicia sativa  
GN=CYP94A1 PE=2 SV=2//7.89216e-131

Medtr2g014760 sp|Q9SGP6|GRXC9\_ARATH Glutaredoxin-C9 OS=Arabidopsis thaliana  
GN=GRXC9 PE=1 SV=1//7.89273e-39

Medtr3g077870 sp|Q9ZUD9|SRO2\_ARATH Probable inactive poly [ADP-ribose] polymerase  
SRO2 OS=Arabidopsis thaliana GN=SRO2 PE=1 SV=1//1.13472e-59

Medtr8g079360 sp|Q9FKZ1|DRL42\_ARATH Probable disease resistance protein At5g66900  
OS=Arabidopsis thaliana GN=At5g66900 PE=2 SV=1//8.26087e-119

Medtr7g111380 sp|Q0DKW8|LTI6B\_ORYSJ Hydrophobic protein LTI6B OS=Oryza sativa  
subsp. japonica GN=LTI6B PE=2 SV=1//4.56312e-14

Medtr5g037610 sp|Q40392|TMVRN\_NICGU TMV resistance protein N OS=Nicotiana glutinosa  
GN=N PE=1 SV=1//1.55164e-42

Medtr5g064360 -//-

Medtr5g083500 -//-

Medtr3g028490 -//-

AC233682\_15 -//-

Medtr4g068520 sp|O23164|CRPM4\_ARATH Cold-regulated 413 plasma membrane protein 4  
OS=Arabidopsis thaliana GN=At4g37220 PE=2 SV=2//2.25242e-37

Medtr8g041820 sp|O64774|Y1146\_ARATH G-type lectin S-receptor-like serine/threonine-protein  
kinase At1g61460 OS=Arabidopsis thaliana GN=At1g61460 PE=2  
SV=4//4.62315e-34

Medtr1g075230 -//-

Medtr5g063080 sp|Q6ZGP8|TPP4\_ORYSJ Probable trehalose-phosphate phosphatase 4  
OS=Oryza sativa subsp. japonica GN=TPP4 PE=2 SV=1//6.9355e-102

Medtr5g087080 sp|Q9C9H7|RLP12\_ARATH Receptor-like protein 12 OS=Arabidopsis thaliana  
 GN=RLP12 PE=2 SV=2//9.33685e-08

Medtr8g038100 sp|P08688|ALB2\_PEA Albumin-2 OS=Pisum sativum PE=2 SV=1//2.46384e-81

Medtr6g045200 sp|Q9FLV9|SLAH3\_ARATH S-type anion channel SLAH3 OS=Arabidopsis  
 thaliana GN=SLAH3 PE=1 SV=1//0

Medtr5g062370 sp|Q9SGZ5|BXL7\_ARATH Probable beta-D-xylosidase 7 OS=Arabidopsis  
 thaliana GN=BXL7 PE=2 SV=2//1.50151e-07

Medtr8g013610 sp|Q9SXB8|Y1133\_ARATH G-type lectin S-receptor-like  
 serine/threonine-protein kinase At1g11330 OS=Arabidopsis thaliana  
 GN=At1g11330 PE=1 SV=3//8.49967e-12

Medtr3g101260 -//-

Medtr2g011210 sp|O81906|B120\_ARATH G-type lectin S-receptor-like serine/threonine-protein  
 kinase B120 OS=Arabidopsis thaliana GN=B120 PE=1 SV=1//6.94318e-16

Medtr2g089140 sp|Q8LDW9|XTH9\_ARATH Xyloglucan endotransglucosylase/hydrolase protein  
 9 OS=Arabidopsis thaliana GN=XTH9 PE=2 SV=2//3.1067e-64

Medtr1g045610 sp|Q9LK95|MYB21\_ARATH Transcription factor MYB21 OS=Arabidopsis  
 thaliana GN=MYB21 PE=1 SV=1//3.89015e-15

Medtr3g084630 sp|P35694|BRU1\_SOYBN Brassinosteroid-regulated protein BRU1 OS=Glycine  
 max PE=2 SV=1//1.94135e-37

Medtr5g035980 sp|Q8YRI1|YY46\_NOSS1 Uncharacterized WD repeat-containing protein  
 alr3466 OS=Nostoc sp. (strain PCC 7120 / UTEX 2576) GN=alr3466 PE=4  
 SV=1//1.34363e-13

Medtr7g086340 -//-

Medtr8g037670 sp|P08688|ALB2\_PEA Albumin-2 OS=Pisum sativum PE=2 SV=1//3.13971e-84

Medtr4g082990 sp|Q96558|UGDH\_SOYBN UDP-glucose 6-dehydrogenase OS=Glycine max  
 PE=2 SV=1//7.24654e-90

Medtr2g088000 sp|Q9C519|WRKY6\_ARATH WRKY transcription factor 6 OS=Arabidopsis

thaliana GN=WRKY6 PE=1 SV=1//3.75511e-88  
 Medtr7g111350 sp|Q9ZNS6|RCI2B\_ARATH Hydrophobic protein RCI2B OS=Arabidopsis  
 thaliana GN=RCI2B PE=2 SV=1//6.52392e-25  
 Medtr3g008920 sp|P49173|NIP1\_NICAL Probable aquaporin NIP-type OS=Nicotiana glauca  
 PE=2 SV=1//2.7168e-104  
 Medtr1g104890 sp|Q8GYA4|CRK10\_ARATH Cysteine-rich receptor-like protein kinase 10  
 OS=Arabidopsis thaliana GN=CRK10 PE=1 SV=3//1.53087e-11  
 AC151738\_9 sp|Q40392|TMVRN\_NICGU TMV resistance protein N OS=Nicotiana glutinosa  
 GN=N PE=1 SV=1//2.50303e-84  
 Medtr5g074600 sp|B6VJS4|ROMT\_VITVI Trans-resveratrol di-O-methyltransferase OS=Vitis  
 vinifera GN=ROMT PE=1 SV=2//2.02706e-137  
 Medtr4g100950 sp|F4JMI5|GUX7\_ARATH Putative glucuronosyltransferase PGSIP7  
 OS=Arabidopsis thaliana GN=PGSIP7 PE=3 SV=1//6.50111e-18  
 Medtr1g025250 sp|Q93X17|SNAK2\_SOLTU Snakin-2 OS=Solanum tuberosum GN=SN2 PE=1  
 SV=1//3.5008e-24  
 Medtr1g081240 sp|O23969|SF21\_HELAN Pollen-specific protein SF21 OS=Helianthus annuus  
 GN=SF21 PE=2 SV=1//5.41644e-08  
 Medtr5g014090 sp|Q9FUR2|IP5P2\_ARATH Type I inositol 1,4,5-trisphosphate 5-phosphatase 2  
 OS=Arabidopsis thaliana GN=IP5P2 PE=1 SV=2//0  
 Medtr1g031520 sp|Q9FID6|Y5392\_ARATH Probable receptor-like protein kinase At5g39020  
 OS=Arabidopsis thaliana GN=At5g39020 PE=2 SV=1//6.5193e-91  
 Medtr8g091390 sp|P24792|ASO\_CUCMA L-ascorbate oxidase OS=Cucurbita maxima GN=AAO  
 PE=1 SV=2//0  
 CU651566\_11 sp|Q9Y7K5|YGI3\_SCHPO Uncharacterized WD repeat-containing protein  
 C2A9.03 OS=Schizosaccharomyces pombe (strain 972 / ATCC 24843)  
 GN=SPBC2A9.03 PE=2 SV=2//1.37559e-40  
 Medtr5g070490 sp|Q7XA42|RGA1\_SOLBU Putative disease resistance protein RGA1

OS=Solanum bulbocastanum GN=RGA1 PE=2 SV=2//0

Medtr6g025680 -//-

sp|Q9C7S5|PSYR1\_ARATH Tyrosine-sulfated glycopeptide receptor 1  
Medtr3g041560 OS=Arabidopsis thaliana GN=PSYR1 PE=2 SV=1//1.58416e-48

Medtr3g077630 -//-

Medtr7g111770 -//-

sp|Q9SGZ5|BXL7\_ARATH Probable beta-D-xylosidase 7 OS=Arabidopsis  
Medtr5g062650 thaliana GN=BXL7 PE=2 SV=2//0

sp|Q0WNJ6|CLAH1\_ARATH Clathrin heavy chain 1 OS=Arabidopsis thaliana  
Medtr5g070480 GN=CHC1 PE=1 SV=1//6.02121e-09

Medtr4g124320 -//-

sp|C0LGQ5|GSO1\_ARATH LRR receptor-like serine/threonine-protein kinase  
AC235674\_10 GSO1 OS=Arabidopsis thaliana GN=GSO1 PE=2 SV=1//1.00512e-26

sp|Q9LQQ4|H2B1\_ARATH Histone H2B.1 OS=Arabidopsis thaliana  
Medtr4g063240 GN=At1g07790 PE=1 SV=3//1.80431e-59

sp|Q9SSA7|GLIP5\_ARATH GDSL esterase/lipase 5 OS=Arabidopsis thaliana  
Medtr6g031090 GN=GLIP5 PE=2 SV=2//2.32255e-07

Medtr6g021900 -//-

sp|Q9SIA3|MATE6\_ARATH MATE efflux family protein 6 OS=Arabidopsis  
Medtr5g010830 thaliana GN=DTXL2 PE=2 SV=2//9.89743e-79

sp|P30075|CHS4\_MEDSA Chalcone synthase 4 OS=Medicago sativa  
Medtr1g098140 GN=CHS4 PE=2 SV=2//0

sp|Q9LY00|WRK70\_ARATH Probable WRKY transcription factor 70  
Medtr7g073380 OS=Arabidopsis thaliana GN=WRKY70 PE=2 SV=1//5.07013e-11

Medtr3g028470 -//-

sp|P93338|GAPN\_NICPL NADP-dependent glyceraldehyde-3-phosphate  
Medtr1g014320 dehydrogenase OS=Nicotiana plumbaginifolia GN=GAPN PE=2

SV=1//1.09825e-13

Medtr4g094010 sp|Q8RXN0|AB11G\_ARATH ABC transporter G family member 11  
OS=Arabidopsis thaliana GN=ABCG11 PE=1 SV=1//0

Medtr1g098460 sp|Q70II3|EF110\_ARATH Ethylene-responsive transcription factor ERF110  
OS=Arabidopsis thaliana GN=ERF110 PE=2 SV=2//9.60079e-16

Medtr2g033820 sp|Q9FGZ4|WRK48\_ARATH Probable WRKY transcription factor 48  
OS=Arabidopsis thaliana GN=WRKY48 PE=2 SV=1//5.05395e-14

Medtr3g055380 sp|Q9XGY6|WAXS1\_SIMCH Long-chain-alcohol O-fatty-acyltransferase  
OS=Simmondsia chinensis PE=1 SV=1//4.44066e-81

Medtr1g031650 -//-

Medtr5g062320 sp|Q9SGZ5|BXL7\_ARATH Probable beta-D-xylosidase 7 OS=Arabidopsis  
thaliana GN=BXL7 PE=2 SV=2//1.89419e-07

Medtr2g042900 sp|Q9S7M2|TI10B\_ARATH Protein TIFY 10B OS=Arabidopsis thaliana  
GN=TIFY10B PE=1 SV=1//1.66914e-33

Medtr1g090150 sp|Q9FQA3|GST23\_MAIZE Glutathione transferase GST 23 OS=Zea mays  
PE=2 SV=1//5.9693e-66

Medtr5g023730 sp|F4HUK6|AAE1\_ARATH Probable acyl-activating enzyme 1, peroxisomal  
OS=Arabidopsis thaliana GN=AAE1 PE=2 SV=1//2.18497e-174

Medtr6g088450 sp|Q8VZ80|PLT5\_ARATH Polyol transporter 5 OS=Arabidopsis thaliana  
GN=PLT5 PE=1 SV=2//2.73902e-68

Medtr2g100490 sp|Q8S3D2|BH087\_ARATH Transcription factor bHLH87 OS=Arabidopsis  
thaliana GN=BHLH87 PE=2 SV=1//1.5934e-63

Medtr7g089860 sp|O80669|SIB2\_ARATH Sigma factor binding protein 2, chloroplastic  
OS=Arabidopsis thaliana GN=SIB2 PE=2 SV=1//2.66375e-08

Medtr3g064370 sp|Q8H191|PAO4\_ARATH Probable polyamine oxidase 4 OS=Arabidopsis  
thaliana GN=PAO4 PE=1 SV=1//1.58298e-08

Medtr4g076640 -//-



Medtr8g069320 -//-

Medtr8g092590 sp|Q94JQ6|CESA6\_ARATH Cellulose synthase A catalytic subunit 6  
[UDP-forming] OS=Arabidopsis thaliana GN=CESA6 PE=1 SV=2//3.14126e-06

Medtr5g088990 -//-

Medtr8g069280 -//-

Medtr3g107730 sp|Q9SUU1|BOR7\_ARATH Probable boron transporter 7 OS=Arabidopsis  
thaliana GN=BOR7 PE=2 SV=3//8.80234e-12

Medtr2g101590 sp|Q9M817|PTR6\_ARATH Probable peptide transporter At1g52190  
OS=Arabidopsis thaliana GN=At1g52190 PE=1 SV=1//0

Medtr6g072250 sp|Q40392|TMVRN\_NICGU TMV resistance protein N OS=Nicotiana glutinosa  
GN=N PE=1 SV=1//2.4066e-07

Medtr7g093530 sp|Q38910|XTH23\_ARATH Probable xyloglucan  
endotransglucosylase/hydrolase protein 23 OS=Arabidopsis thaliana  
GN=XTH23 PE=2 SV=1//7.38481e-149

Medtr7g023560 sp|Q9SLD4|ZAT11\_ARATH Zinc finger protein ZAT11 OS=Arabidopsis thaliana  
GN=ZAT11 PE=2 SV=1//5.78802e-30

Medtr2g007960 sp|Q6J163|5NG4\_PINTA Auxin-induced protein 5NG4 OS=Pinus taeda PE=2  
SV=1//1.79172e-06

Medtr1g025950 sp|Q7XWU3|CADH6\_ORYSJ Probable cinnamyl alcohol dehydrogenase 6  
OS=Oryza sativa subsp. japonica GN=CAD6 PE=2 SV=2//8.10059e-173

Medtr6g007980 -//-

Medtr8g061110 sp|Q9LW83|CE101\_ARATH G-type lectin S-receptor-like  
serine/threonine-protein kinase CES101 OS=Arabidopsis thaliana GN=CES101  
PE=2 SV=2//7.7766e-07

Medtr2g069420 -//-

Medtr2g062410 -//-

Medtr6g086120 sp|Q9LHF1|LRX4\_ARATH Leucine-rich repeat extensin-like protein 4

OS=Arabidopsis thaliana GN=LRX4 PE=1 SV=1//0  
sp|O81832|Y4729\_ARATH G-type lectin S-receptor-like serine/threonine-protein  
Medtr3g019490 kinase At4g27290 OS=Arabidopsis thaliana GN=At4g27290 PE=2  
SV=4//7.10829e-10

sp|O81905|SD18\_ARATH Receptor-like serine/threonine-protein kinase SD1-8  
Medtr2g011170 OS=Arabidopsis thaliana GN=SD18 PE=1 SV=1//0

sp|P29162|ASOL\_TOBAC L-ascorbate oxidase homolog OS=Nicotiana  
Medtr5g018270 tabacum PE=2 SV=1//0

sp|A2BW76|EFTS\_PROM5 Elongation factor Ts OS=Prochlorococcus marinus  
Medtr2g039780 (strain MIT 9515) GN=tsf PE=3 SV=1//1.8968e-52

sp|P29136|MEP1\_SOYBN Metalloendoproteinase 1 OS=Glycine max PE=1  
Medtr5g036080 SV=2//4.47403e-41

sp|Q40392|TMVRN\_NICGU TMV resistance protein N OS=Nicotiana glutinosa  
Medtr6g072310 GN=N PE=1 SV=1//1.56301e-127

sp|O35250|EXOC7\_MOUSE Exocyst complex component 7 OS=Mus musculus  
Medtr4g062330 GN=Exoc7 PE=1 SV=2//6.91472e-08

sp|Q40392|TMVRN\_NICGU TMV resistance protein N OS=Nicotiana glutinosa  
Medtr2g039770 GN=N PE=1 SV=1//9.34088e-130

sp|Q9FWX7|AB11B\_ARATH ABC transporter B family member 11  
Medtr4g123990 OS=Arabidopsis thaliana GN=ABCB11 PE=2 SV=1//0

sp|Q7XA42|RGA1\_SOLBU Putative disease resistance protein RGA1  
Medtr7g091200 OS=Solanum bulbocastanum GN=RGA1 PE=2 SV=2//3.60056e-11

sp|Q9FPR3|EDR1\_ARATH Serine/threonine-protein kinase EDR1  
Medtr5g010730 OS=Arabidopsis thaliana GN=EDR1 PE=1 SV=1//1.73452e-26

sp|Q40392|TMVRN\_NICGU TMV resistance protein N OS=Nicotiana glutinosa  
Medtr7g038520 GN=N PE=1 SV=1//8.94211e-34

Medtr8g104490 -//-

Medtr1g075480 sp|Q86TV6|TTC7B\_HUMAN Tetratricopeptide repeat protein 7B OS=Homo sapiens GN=TTC7B PE=1 SV=3//4.64624e-13  
 Medtr2g088080 sp|Q00624|ASOL\_BRANA L-ascorbate oxidase homolog OS=Brassica napus GN=Bp10 PE=2 SV=1//1.52559e-176  
 Medtr5g031310 sp|Q9ZRF1|MTDH\_FRAAN Probable mannitol dehydrogenase OS=Fragaria ananassa GN=CAD PE=2 SV=1//2.8403e-14  
 Medtr3g094970 -/-  
 Medtr8g083150 sp|Q23262|RLF32\_ARATH Protein RALF-like 32 OS=Arabidopsis thaliana GN=RALFL32 PE=3 SV=1//1.38064e-22  
 Medtr3g049970 sp|Q9MB73|LGT\_CITUN Limonoid UDP-glucosyltransferase OS=Citrus unshiu PE=2 SV=1//0  
 Medtr4g093580 sp|Q964D8|BUP1\_DICDI Beta-ureidopropionase OS=Dictyostelium discoideum GN=pyd3 PE=1 SV=1//1.15546e-12  
 Medtr7g090420 -/-  
 Medtr3g008500 sp|O64896|TPPA\_ARATH Trehalose-phosphate phosphatase A OS=Arabidopsis thaliana GN=TPPA PE=1 SV=1//1.53468e-17  
 Medtr5g029370 sp|Q9STM3|REF6\_ARATH Lysine-specific demethylase REF6 OS=Arabidopsis thaliana GN=REF6 PE=1 SV=1//1.74015e-65  
 Medtr3g079340 -/-  
 Medtr1g097900 sp|P30075|CHS4\_MEDSA Chalcone synthase 4 OS=Medicago sativa GN=CHS4 PE=2 SV=2//0  
 Medtr1g102240 -/-  
 Medtr1g019340 sp|Q9Y2H1|ST38L\_HUMAN Serine/threonine-protein kinase 38-like OS=Homo sapiens GN=STK38L PE=1 SV=3//4.28874e-145  
 Medtr7g075910 sp|P93733|PLDB1\_ARATH Phospholipase D beta 1 OS=Arabidopsis thaliana GN=PLDBETA1 PE=2 SV=4//0  
 Medtr2g012990 -/-

Medtr1g102360 sp|Q9STJ8|Y4539\_ARATH Receptor-like serine/threonine-protein kinase  
At4g25390 OS=Arabidopsis thaliana GN=At4g25390 PE=1 SV=1//4.64923e-31

Medtr5g069600 sp|Q9FIL7|CRCK1\_ARATH Calmodulin-binding receptor-like cytoplasmic  
kinase 1 OS=Arabidopsis thaliana GN=CRCK1 PE=1 SV=1//7.14883e-11

Medtr7g117890 sp|Q681N2|PUB15\_ARATH U-box domain-containing protein 15  
OS=Arabidopsis thaliana GN=PUB15 PE=2 SV=2//5.29736e-19

Medtr3g031220 sp|Q8S8P5|WRK33\_ARATH Probable WRKY transcription factor 33  
OS=Arabidopsis thaliana GN=WRKY33 PE=1 SV=2//3.04476e-16

Medtr5g062430 sp|Q9SGZ5|BXL7\_ARATH Probable beta-D-xylosidase 7 OS=Arabidopsis  
thaliana GN=BXL7 PE=2 SV=2//0

Medtr3g084510 sp|P43298|TMK1\_ARATH Probable receptor protein kinase TMK1  
OS=Arabidopsis thaliana GN=TMK1 PE=2 SV=1//2.31987e-60

Medtr7g084250 sp|Q9LX66|HERK\_ARATH Receptor-like protein kinase HERK 1  
OS=Arabidopsis thaliana GN=HERK1 PE=1 SV=1//4.56205e-17

Medtr3g088970 sp|Q9SZX3|ASSY\_ARATH Argininosuccinate synthase, chloroplastic  
OS=Arabidopsis thaliana GN=At4g24830 PE=2 SV=3//2.18452e-138

CU633465\_13 sp|Q38909|XTH28\_ARATH Probable xyloglucan  
endotransglucosylase/hydrolase protein 28 OS=Arabidopsis thaliana  
GN=XTH28 PE=2 SV=1//1.41362e-159

Medtr4g120760 sp|P17641|PRS1\_SOLTU Pathogenesis-related protein STH-21 OS=Solanum  
tuberosum GN=STH-21 PE=2 SV=1//5.27338e-10

Medtr5g015590 sp|O81108|ACA2\_ARATH Calcium-transporting ATPase 2, plasma  
membrane-type OS=Arabidopsis thaliana GN=ACA2 PE=1 SV=1//0

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**Down-regulated genes in MtCBF4 overexpressing lines**

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Gene ID	Annotation
Medtr4g080020	sp Q9SIM9 ORE9_ARATH F-box protein ORE9 OS=Arabidopsis thaliana GN=ORE9 PE=1 SV=2//0

Medtr5g096530 sp|COLGR3|Y4265\_ARATH Probable LRR receptor-like serine/threonine-protein kinase At4g26540 OS=Arabidopsis thaliana GN=At4g26540 PE=1 SV=1//0

Medtr5g041700 sp|Q9C554|EXPA1\_ARATH Expansin-A1 OS=Arabidopsis thaliana GN=EXPA1 PE=2 SV=1//1.46842e-06

Medtr8g087710 sp|P08995|NO26\_SOYBN Nodulin-26 OS=Glycine max PE=1 SV=2//2.08445e-140

Medtr3g110420 sp|O80592|AAP8\_ARATH Amino acid permease 8 OS=Arabidopsis thaliana GN=AAP8 PE=1 SV=1//1.4954e-91

Medtr3g073010 sp|Q920N2|BPL1\_MOUSE Biotin--protein ligase OS=Mus musculus GN=Hlcs PE=1 SV=1//8.91162e-38

Medtr7g092580 -//-

Medtr5g033880 sp|Q9LDE3|FBK9\_ARATH F-box/kelch-repeat protein At1g23390 OS=Arabidopsis thaliana GN=At1g23390 PE=2 SV=1//1.87865e-67

Medtr2g099790 -//-

Medtr5g072500 sp|Q2MHE4|HT1\_ARATH Serine/threonine-protein kinase HT1 OS=Arabidopsis thaliana GN=HT1 PE=1 SV=1//4.73441e-10

Medtr5g026080 -//-

Medtr1g086380 sp|Q06GT0|PSBA\_PIPCE Photosystem Q(B) protein OS=Piper cenocladum GN=psbA PE=3 SV=1//7.57385e-33

Medtr5g072455 -//-

Medtr6g057520 -//-

Medtr3g065690 -//-

Medtr3g079850 sp|O64774|Y1146\_ARATH G-type lectin S-receptor-like serine/threonine-protein kinase At1g61460 OS=Arabidopsis thaliana GN=At1g61460 PE=2 SV=4//1.26825e-17

Medtr1g042940 -//-

Medtr4g050770 sp|P06585|PSBA\_PEA Photosystem Q(B) protein OS=Pisum sativum GN=psbA

PE=1 SV=3//2.39174e-70

Medtr6g078380 sp|Q7XKV4|BGL12\_ORYSJ Beta-glucosidase 12 OS=*Oryza sativa* subsp. japonica GN=BGLU12 PE=2 SV=2//0

Medtr4g059900 -//-

Medtr1g080020 sp|Q9SPK4|PPCK1\_ARATH Phosphoenolpyruvate carboxylase kinase 1 OS=*Arabidopsis thaliana* GN=PPCK1 PE=1 SV=1//1.91095e-110

Medtr7g071220 -//-

Medtr4g018675 -//-

Medtr3g062880 -//-

Medtr5g054900 sp|Q9SX27|PAN\_ARATH Transcription factor PERIANTHIA OS=*Arabidopsis thaliana* GN=PAN PE=1 SV=1//1.2416e-100

Medtr5g062190 sp|A2RAR6|EXGA\_ASPNC Probable glucan 1,3-beta-glucosidase A OS=*Aspergillus niger* (strain CBS 513.88 / FGSC A1513) GN=exgA PE=3 SV=1//1.79071e-19

Medtr7g077340 sp|Q8W4Y8|IBB\_LENCU Bowman-Birk type proteinase inhibitor OS=*Lens culinaris* PE=1 SV=2//6.35597e-39

Medtr3g020920 -//-

Medtr2g035430 sp|O64759|CAAT5\_ARATH Cationic amino acid transporter 5 OS=*Arabidopsis thaliana* GN=CAT5 PE=1 SV=1//2.48843e-107

Medtr3g021040 -//-

Medtr2g066235 -//-

Medtr3g085710 -//-

Medtr5g032030 sp|Q6SZ87|NAT11\_ARATH Nucleobase-ascorbate transporter 11 OS=*Arabidopsis thaliana* GN=NAT11 PE=2 SV=1//2.78617e-08

Medtr7g102170 -//-

Medtr2g101410 sp|P87053|POF1\_SCHPO F-box/WD repeat-containing protein pof1 OS=*Schizosaccharomyces pombe* (strain 972 / ATCC 24843) GN=pof1 PE=1

SV=1//3.07527e-09

Medtr1g072095 -//-

AC233577\_31 sp|P45458|MASY\_SOYBN Malate synthase, glyoxysomal (Fragment)  
OS=Glycine max PE=2 SV=1//1.50806e-60

Medtr3g080010 sp|Q69KJ0|RTL3\_ORYSJ Ribonuclease 3-like protein 3 OS=Oryza sativa  
subsp. japonica GN=Os06g0358800 PE=2 SV=1//6.03713e-07

Medtr4g072980 sp|P33080|AX10A\_SOYBN Auxin-induced protein X10A OS=Glycine max PE=2  
SV=1//3.28902e-10

Medtr3g082050 sp|Q6L8G0|ZIP5\_ORYSJ Zinc transporter 5 OS=Oryza sativa subsp. japonica  
GN=ZIP5 PE=2 SV=1//3.29281e-33

Medtr6g088320 sp|Q9SVV2|XTH26\_ARATH Probable xyloglucan  
endotransglucosylase/hydrolase protein 26 OS=Arabidopsis thaliana  
GN=XTH26 PE=2 SV=1//3.50498e-135

Medtr3g077030 -//-

Medtr7g008970 -//-

Medtr5g065960 -//-

Medtr4g026570 -//-

Medtr5g074740 sp|P22195|PER1\_ARAHY Cationic peroxidase 1 OS=Arachis hypogaea  
GN=PNC1 PE=1 SV=2//4.58101e-12

Medtr6g088140 sp|P38605|CAS1\_ARATH Cycloartenol synthase OS=Arabidopsis thaliana  
GN=CAS1 PE=1 SV=2//1.03539e-32

Medtr4g057430 sp|P93046|XTH31\_ARATH Probable xyloglucan  
endotransglucosylase/hydrolase protein 31 OS=Arabidopsis thaliana  
GN=XTH31 PE=2 SV=2//6.36393e-10

Medtr7g099200 -//-

Medtr7g102155 -//-

Medtr1g083020 sp|Q43191|LOX15\_SOLTU Probable linoleate 9S-lipoxygenase 5 OS=Solanum

tuberosum GN=LOX1.5 PE=2 SV=1//0

Medtr2g028580 sp|Q9LT96|Y5977\_ARATH Probable leucine-rich repeat receptor-like protein  
kinase At5g49770 OS=Arabidopsis thaliana GN=At5g49770 PE=2 SV=1//0

Medtr6g006240 -//-

Medtr8g069250 -//-

Medtr2g008470 sp|P53392|SUT2\_STYHA High affinity sulfate transporter 2 OS=Stylosanthes  
hamata GN=ST2 PE=2 SV=1//0

Medtr4g057450 sp|Q9SJL9|XTH32\_ARATH Probable xyloglucan  
endotransglucosylase/hydrolase protein 32 OS=Arabidopsis thaliana  
GN=XTH32 PE=2 SV=1//7.13429e-47

Medtr8g102040 -//-

Medtr7g046365 -//-

Medtr5g078110 -//-

Medtr5g091180 sp|Q84WU2|UBP13\_ARATH Ubiquitin carboxyl-terminal hydrolase 13  
OS=Arabidopsis thaliana GN=UBP13 PE=1 SV=1//1.72842e-38

Medtr1g080440 sp|Q9FRS6|PXL1\_ARATH Leucine-rich repeat receptor-like protein kinase  
PXL1 OS=Arabidopsis thaliana GN=PXL1 PE=2 SV=1//6.54401e-44

Medtr3g076920 -//-

Medtr4g022470 sp|O48850|VA725\_ARATH Vesicle-associated membrane protein 725  
OS=Arabidopsis thaliana GN=VAMP725 PE=2 SV=2//3.45125e-14

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**Supplemental Table 2. Oligonucleotide probes used in EMSA assays and the artificial fragment sequence used in Yeast one-hybrid assay.**

<b>Name</b>	<b>Sequences (5'-3')</b>
MtCAS15-F	TTATTCACGTAAAAAATTGCCACGT <u>TACCGACATA</u> CTGCGTACATTTTTTTCTTGGTAT
MtCAS15-R	ATACCAAGAAAAAATGTACGCAGT <u>ATGTCCGGT</u> ACGTGGGCAATTTTTTACGTGAATAA
MtCAS15 mu-F	TTATTCACGTAAAAAATTGCCACGaaaaaaaaACTGCGTACATTTTTTTCTTGGTAT
MtCAS15 mu-R	ATACCAAGAAAAAATGTACGCAGTtttttttCGTGGGCAATTTTTTACGTGAATAA
MtCBF4P1-F	GAAAATACCCCTGCGCT <u>AGTTA</u> ACTAACGTAGGTATAAAATTAACATGAC
MtCBF4P1-R	GTCATGTTAATTTTATACCTACGTTAGTT <u>AACTA</u> GCGCAGGGGTATTTTC
MtCBF4P1-mF	GAAAATACCCCTGCGCTAGTgggggggGTAGGTATAAAATTAACATGAC
MtCBF4P1-mR	GTCATGTTAATTTTATACCTACCCCCCCCCACTAGCGCAGGGGTATTTTC
MtCBF4P2-F	AAAGTACCAAGTACTT <u>ACTAACCAC</u> ACTGTTTTTCAACTAGTAGAATT <u>AACAA</u> ACTTT CCTTCTACTATTCTT
MtCBF4P2-R	AAGAATAGTAGAAGGAAAG <u>TTTGTTA</u> AATTCTACTAGTTGAAAAACAGTGTGGTTAGT AAGTACTTGGTACTTT
MtCBF4P2-mF	AAAGTACCAAGTACTTAGGGGGGGCACTGTTTTTCAACTAGTAGAATTAGGGGGGGCT TTCCTTCTACTATTCTT
MtCBF4P2-mR	AAGAATAGTAGAAGGAAAGCCCCCCTAATTCTACTAGTTGAAAAACAGTGCCCCCCC TAAGTACTTGGTACTTT
MtCBF4P3-F	CATCACAACACA <u>ACCA</u> AGCTCATATTAATCTTAAAAAATTAAGCAGGTTAT <u>TAACA</u> <u>AACTACCGT</u> GTTTTG
MtCBF4P3-R	CAAAACACGGTAG <u>TTTGTTA</u> AATAACCGTGCTTTTAATTTTTTAAGATTTAATATGAGCTI <u>GGTTGTGTTGTGATG</u>
MtCBF4P4-F	AACTTTGTTT <u>GGATAC</u> ACGTTGAAATGAA <u>ACTAAC</u> ATGCACTGTTCCGGGTGGTATTGAC AAAAAAACAAT
MtCBF4P4-R	ATTGTTTTTTGTCAATACCACCCGAACAGTGCAT <u>GTTAGTTT</u> CATTTCAACGTGTATCC

AAACAAAGTT

MtCBF4P5-F TGTCCCACATTCAATTCCTTAACCATAGTACATACCGTGG

MtCBF4P5-R CCACGGTATGTACTATTGGTTAAGGAATTGAATGTGGGACA

MtCBF4P6-F GTTTAACCTAGCTATCGAATTAAGAACCTCAAGTCATACAATTCGCAAACCTTCAGTCT

MtCBF4P6-R AACTGAAGTTTGC GAATTGTATGACTTGAGGTTCTTTAATTCGATAGCTAGGTTAAAC

Y1HMYB-F agcttTAGTTAACTAACGTAGGTTAGTTAACTAACGTAGGTTAGTTAACTAACGTAGGTc

Y1HMYB-R tcgagACCTACGTTAGTTAACTAACCTACGTTAGTTAACTAACCTACGTTAGTTAACTAAa

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Underlined bases indicate the DRE or MYB *cis*-elements.

**Supplemental Table 3. List of yeast two-hybrid assay clones identified with MtMYB3 protein as bait.**

Accession	Annotation
EF468488	<i>Medicago truncatula</i> MYB transcription factor MYB61
XM_003592927	<i>Medicago truncatula</i> 2Fe-2S ferredoxin superfamily protein
XM_003594014	<i>Medicago truncatula</i> methionine sulfoxide reductase B
XM_003597038	<i>Medicago truncatula</i> cytochrome b6-F complex iron-sulfur subunit
XM_003592050	<i>Medicago truncatula</i> ABA/WDS induced protein
XM_003624441	<i>Medicago truncatula</i> basic helix loop helix protein BHLH23
XM_013594115	<i>Medicago truncatula</i> pyrroline-5-carboxylate reductase
XM_003612616	<i>Medicago truncatula</i> phosphoribulokinase
XM_003601109	<i>Medicago truncatula</i> pyruvate dehydrogenase E1 beta subunit
XM_003606315	<i>Medicago truncatula</i> zinc finger, C3HC4 type (RING finger) protein
XM_013601005	<i>Medicago truncatula</i> synaptotagmin
XM_003618130	<i>Medicago truncatula</i> polyribonucleotide nucleotidyltransferase
XM_003625029	<i>Medicago truncatula</i> N-acetyltransferase

## Supplemental Table 4. Primers used in this study.

Primer Name	Primer Sequences (5'-3')
<b>For cloning and genotyping</b>	
<b>subcellular localization</b>	
pE3025- <i>MtMYB5</i> -F	<u>CTCGAGGATGGATACTAATTACAAAAC</u>
pE3025- <i>MtMYB5</i> -R	<u>GGTACCCACTCCAAATATCCTTGTCAT</u>
pE3025- <i>MtMYB61</i> -F	<u>CTCGAGGATGAGAGGTATGGATATTA</u>
pE3025- <i>MtMYB61</i> -R	<u>GGTACCCCGCAAGTAAATTGTATTTAT</u>
<b>Overexpression vector</b>	
pMDC32- <i>MtCBF4</i> -F	<u>GGTACCATGTTTACTATGAATCAATTTTCG</u>
pMDC32- <i>MtCBF4</i> -R	<u>CGATCGTAATTTATCATCATCATCTTTGTAATCGATGTCGTGGTCCTTATAG</u> TCACCATCATGATCTTTGTAATCAAATGAGTAACTCCACAATGAAACT
pMDC32- <i>MtMYB3</i> -F	<u>GGTACCATGGATACTAATTACAAA</u>
pMDC32- <i>MtMYB3</i> -R	<u>ACTAGTTCATTTATCATCATCATCTTTGTAATCGATGTCGTGGTCCTTATA</u> GTCACCATCATGATCTTTGTAATCTAAATCATCAGCCAATTGTT
pMDC32- <i>MtMYB61</i> -F	<u>GGTACCATGAGAGGTATGGATATTAAGGT</u>
pMDC32- <i>MtMYB61</i> -R	<u>CGATCGTCATTTATCATCATCATCTTTGTAATCGATGTCGTGGTCCTTATAG</u> TCACCATCATGATCTTTGTAATCCGCAAGTAAATTGTATTTTATTTC
<b>Yeast-two-hybrid</b>	
pGBKT7- <i>MtMYB61</i> -F	<u>CATATGAGAGGTATGGATATTAAGGTTC</u>
pGBKT7- <i>MtMYB61</i> -R	<u>GTCGACTCACGCAAGTAAATTGTATTTAT</u>
pGADT7- <i>MtMYB3</i> -F	<u>GAATTCATGGATACTAATTACAAAAC</u>
pGADT7- <i>MtMYB3</i> -R	<u>CTCGAGTCATAAATCATCAGCCAATT</u>
pGADT7- <i>MtMYB3N</i> -F	<u>CATATGGATACTAATTACAAAAC</u>
pGADT7- <i>MtMYB3N</i> -R	<u>CTCGAGTCACACCACTCTTGTCTCCA</u>
pGADT7- <i>MtMYB3C</i> -F	<u>GAATTCATGGTGAAGCAAGCTAGGCAA</u>

pGADT7- <i>MtMYB3C</i> -R	<u>CTCGAGTCATAAATCATCAGCCAATT</u>
<b>Pull-down</b>	
pGEX-4T-1- <i>MtMYB3G</i> ST-F	<u>GAATTCATGGATACTAATTACAAAACCAATA</u>
pGEX-4T-1- <i>MtMYB3G</i> ST-R	<u>CTCGAGTCATAAATCATCAGCCAATTGTTGC</u>
pET30a- <i>MtMYB61</i> His-F	<u>CATATGAGAGGTATGGATATTAAGGTTCC</u>
pET30a- <i>MtMYB61</i> His-R	<u>CTCGAGCGCAAGTAAATTGTATTTTATTTC</u>
<b>Bimolecular Fluorescence Complementation</b>	
pSY735- <i>MtMYB61</i> -F	<u>TGCGTCGACCATGAGAGGTATGGATATTAAG</u>
pSY735- <i>MtMYB61</i> -R	<u>CTGACTAGTTCACGCAAGTAAATTGTATTTTATTTCC</u>
pSY736- <i>MtMYB3</i> -F	<u>TGCGTCGACCATGGATACTAATTACAAAAC</u>
pSY736- <i>MtMYB3</i> -R	<u>CTGACTAGTTCATAAATCATCAGCCAATTG</u>
<b>Transient expression assays in <i>Nicotiana benthamiana</i> leaves</b>	
pCAMBIA1381-ProMtCBF4LUC-F	<u>GGATCCTGAATTGAATTTCAAGCACATGTGA</u>
pCAMBIA1381-ProMtCBF4LUC-R	<u>GTCGACGTTCCAAAAAAAAAAAAAAAAAAGAATAGTAG</u>
<b>Transactivation analyses in yeast</b>	
pBD GAL4- <i>MtMYB3</i> -F	<u>GAATTCATGGATACTAATTACAAAAC</u>
pBD GAL4- <i>MtMYB3</i> -R	<u>GTCGACTCATAAATCATCAGCCAATT</u>
pBD GAL4- <i>MtMYB61</i> -F	<u>CCCGGGGGATGAGAGGTATGGATATTA</u>
pBD GAL4- <i>MtMYB61</i> -R	<u>GTCGACTCACGCAAGTAAATTGTATTTTAT</u>
<b>For Real-time PCR</b>	
<b>Gene expression</b>	
<i>MtCBF1</i> -realtimeF	TTATTGGATGTGGATGATTTTG
<i>MtCBF1</i> -realtimeR	AAATTCATTGGCTGGAAGG
<i>MtCBF2</i> -realtimeF	GACACGGCTATTTCCACCTC
<i>MtCBF2</i> -realtimeR	TTCCACAGTGATACCTCTTCATC
<i>MtCBF3</i> -realtimeF	AACCTGCAACTACTCAAGCAAA

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<i>MtCBF3</i> -realtimeR	AGCGCCATATTACTCCACATC
<i>MtCBF4</i> -realtimeF	CGGAAGCAAGGGATATTCAA
<i>MtCBF4</i> -realtimeR	CAAATTCCACGTCAGCAACA
<i>MtMYB3</i> -realtimeF	CAATTACCGGAAGAACCGACA
<i>MtMYB3</i> -realtimeR	GCAGTTGCACCAGAAGATTGGA
<i>MtMYB61</i> -realtimeF	TCCCCGACACGAATAATCCA
<i>MtMYB61</i> -realtimeR	ACAAGCACCGCTCTTCTCCT
<i>MtCAS15</i> -realtimeF	GAGAACACCACGGTGAGTACAA
<i>MtCAS15</i> -realtimeR	CATGTTTCATGACCCTCTCCA
<i>MtLT165</i> -realtimeF	CAATGCGAATAGTTCAGGAAAA
<i>MtLT165</i> -realtimeR	GTGTCCTTCCTTCATCCACAC
<i>MtLT16A</i> -realtimeF	ATTCTTGCCATCATCCTTCC
<i>MtLT16A</i> -realtimeR	AATGACGCCCTGACAAAC
<i>MtLT16B</i> -realtimeF	GGGCACAGCTACCTTCGTT
<i>MtLT16B</i> -realtimeR	AAAGGGTGAGCACCAAACAG
<i>MtCOR413</i> -realtimeF	GCTGGGGAGGTTCTTTCTTT
<i>MtCOR413</i> -realtimeR	CAACCAATCAGGGAAATGCT
<i>MtYGI3</i> -realtimeF	ATTCCCAAGTTCGGGTTTTT
<i>MtYGI3</i> -realtimeR	CCAAGTGCCCTTTTAGGTTTC
<i>MtYY46</i> -realtimeF	CAAGACCCAGACGACGAAA
<i>MtYY46</i> -realtimeR	ACCTTGCAAAACAGCCAAAC
<i>MtActin</i> -realtimeF	CCCCTGGATGTCTGTAGGTT
<i>MtActin</i> -realtimeR	AGAATTAAGTAGCAGCGCAAA

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ChIP-qPCR	
<i>MtCAS15</i> -ChIP-qPCR1	CACCTTAATTTTGTCCAAGAGG
<i>MtCAS15</i> -ChIP-qPCRR1	GGGGAACGAGTGAAGAACAA
<i>MtCAS15</i> -ChIP-qPCR2	CACCTGCTCTCTAATTTATTCACG

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<i>MtCAS15</i> -ChIP-qPCRR2	TCCAGATCTACAATTGCTCTCAA
<i>MtCAS15</i> -ChIP-qPCRF3	GGCTCCAAATGTGCCAAG
<i>MtCAS15</i> -ChIP-qPCRR3	CATGAAGGCTCGTGATGGT
<i>MtCBF4</i> -ChIP-qPCRF1	CTCACGGGATACGAACATTG
<i>MtCBF4</i> -ChIP-qPCRR1	TTTTAGATTGGCCGCTTTCA
<i>MtCBF4</i> -ChIP-qPCRF2	TTCGCAAACCTCAGTCTTTTCTCTT
<i>MtCBF4</i> -ChIP-qPCRR2	GTCATGTTAATTTTATACCTACGTTAG
<i>MtCBF4</i> -ChIP-qPCRF3	TTATGGGACCGAGGGAGTAG
<i>MtCBF4</i> -ChIP-qPCRR3	TTTTGCCTCCCATTTAGACA

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Underlined bases indicate restriction enzyme sites.