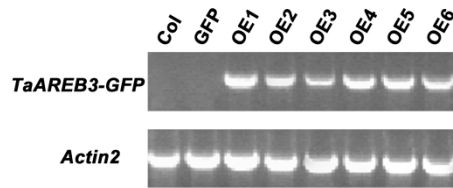


Supplementary Figure 1: Semi-quantitative PCR detecting different expression levels in *Arabidopsis* lines transformed with *TaAREB3*.



Two-week-old seedlings of WT, GFP and 6 transgenic lines were used for RNA extraction and cDNA synthesis. Primers TaAREB3-RT-F and TaAREB3-RT-R were used for semi-quantitative PCR to detect *TaAREB3* gene expression. *Actin2* was used as the control. Primers are listed in the Supplementary table 2.

Supplementary table 1 Primers used for vector construction

Primer name	Primer sequence (5' to 3')	Vector	Restriction enzyme
TaAREB3-F1	ATGGCGTCACAGCCCGGG	pEASY-Blunt	No
TaAREB3-R1	TTGTACATTAACCTTTTGCTTCTTTAGCCTCTC	pEASY-Blunt	No
TaAREB3-F2	CTAGTCTAGAATGGCGTCACAGCCCGGG	pCAMBIA1300-GFP	<i>Xba</i> I
TaAREB3-R2	TGACACTAGTTTGTACATTAACCTTTTGCTTCTTTAGCCTCTC	pCAMBIA1300-GFP	<i>Spe</i> I
TaAREB3-4T1-F	CTAGGAATTCATGGCGTCACAGCCCGGG	pGEX-4T1	<i>Eco</i> R I
TaAREB3-4T1-R	TGACGTCGACTTGTACATTAACCTTTTGCTTCTTTAGCCTCTC	pGEX-4T1	<i>Sal</i> I
TaAREB3-BD-F	GATCCATATGGCGTCACAGCCCGGG	pGBKT7	<i>Nde</i> I
TaAREB3-BD-R	TGACGAATTCCTGTACATTAACCTTTTGCTTCTTTAGCCTCTC	pGBKT7	<i>Eco</i> R I
TaAREB3-N-BD-R	TGACGAATTCCTCCCTGGGAAACAACCCTG	pGBKT7	<i>Eco</i> R I
TaAREB3-M-BD-F	GATCCATATGTTTCTCAAGGACACGAGCGATGC	pGBKT7	<i>Nde</i> I
TaAREB3-M-BD-R	TGACGAATTCGGGGACATCTCCTGATACACCAC	pGBKT7	<i>Eco</i> R I
TaAREB3-C-BD-F	GATCCATATGAATAAGTTGTGGAGAGAAGGCAGAAGAG	pGBKT7	<i>Nde</i> I

Supplementary table 2 Primers used for detecting gene expression by real-time PCR and semi-quantitative PCR

Primer name	Primer sequence (5' to 3')
TaAREB3-RT-F	CTCAAGGACACGAGCGATGCTG
TaAREB3-RT-R	CATTCAGCGGCTGAGGGACAAAC
Tubulin-RT-F	GAGGCTCGTGTGGTCGCTTTGT
Tubulin-RT-R	GCCCAGTTGTTACCCGCACCAGA
Actin2-F	AGCACTTGCACCAAGCAGCATG
Actin2-R	ACGATTCCTGGACCTGCCTCATC
RD29A-F	CGGTGGAAGAGGAAGTGAAAG
RD29A-R	GGAGCCAAGTGATTGTGGAGAC
RD29B-F	CCGCAAAGAACGTCGTTGCCTCA
RD29B-R	CCACCTCCGAGAGAGGTAGCT
COR15A-F	CATCCTCGATGACCTCAACGAGG
COR15A-R	CCTTAGCCTCTCCTGCTTTACCC
COR47-F	GCATGACCATCCCAGGAAGAG

COR47-R	ACTTCCTCTTCAGTGGTCTTGGC
ACTIN2-F	AGCACTTGCACCAAGCAGCATG
ACTIN2-R	ACGATTCTGGACCTGCCTCATC
RAB18-F	TCCACAAGGAAAGTGGTGGT
RAB18-R	TGTCCATCATCCCCTTCTTC
P5CS-F	GTTGCAGAGCTATTCCTTCGCC
P5CS-R	TGTCTCCGTCGACAACTTGCC
RD22-F	GGAACCGCCGTGAACGTTGG
RD22-R	GGTTTACCCGTGTGGACTGCG

Supplementary table 3 Primers used for ChIP assays

Primer name	Primer sequence (5' to 3')
RD29A-P-F	GATCAAGCCGACACAGACACG
RD29A-P-R	GTGAGTAAACAGAGGAGGGTCTCAC
RD29B-P1-F	GAGCCAAATCGGAGACGGTCTTC
RD29B-P1-R	GATACAGTCTGAGCTCCCAAGACG
RD29B-P2-F	GGCCAATAAACGTGGACCGAC
RD29B-P2-R	CACCTCTCTCTGGCTTCTGTCTC
COR47-P1-R	CTAGCCAAAGGATCAGTACTAAATGG
COR47-P1-F	GTGTCTAATGGCCACATGACC
COR47-P2-F	TGCCAAGTCCATTGAAACTCTT
COR47-P2-R	CCCCTCTATTTCTGAAGTCGG
COR15A-P1-F	CTTGTCGGTTIATTTTGTGTAGGC
COR15A-P1-R	GCCATGAAATTGTGGCTACATAC
COR15A-P2-F	GTATGTAGCCACAATTCATGGC
COR15A-P2-R	TTGTTTGGAATGAAAGGAGGAG
Tubulin-F	TATGGTCAAGGCTGGGTTCG
Tubulin-R	CCATGCTCGATGGGGTACTT