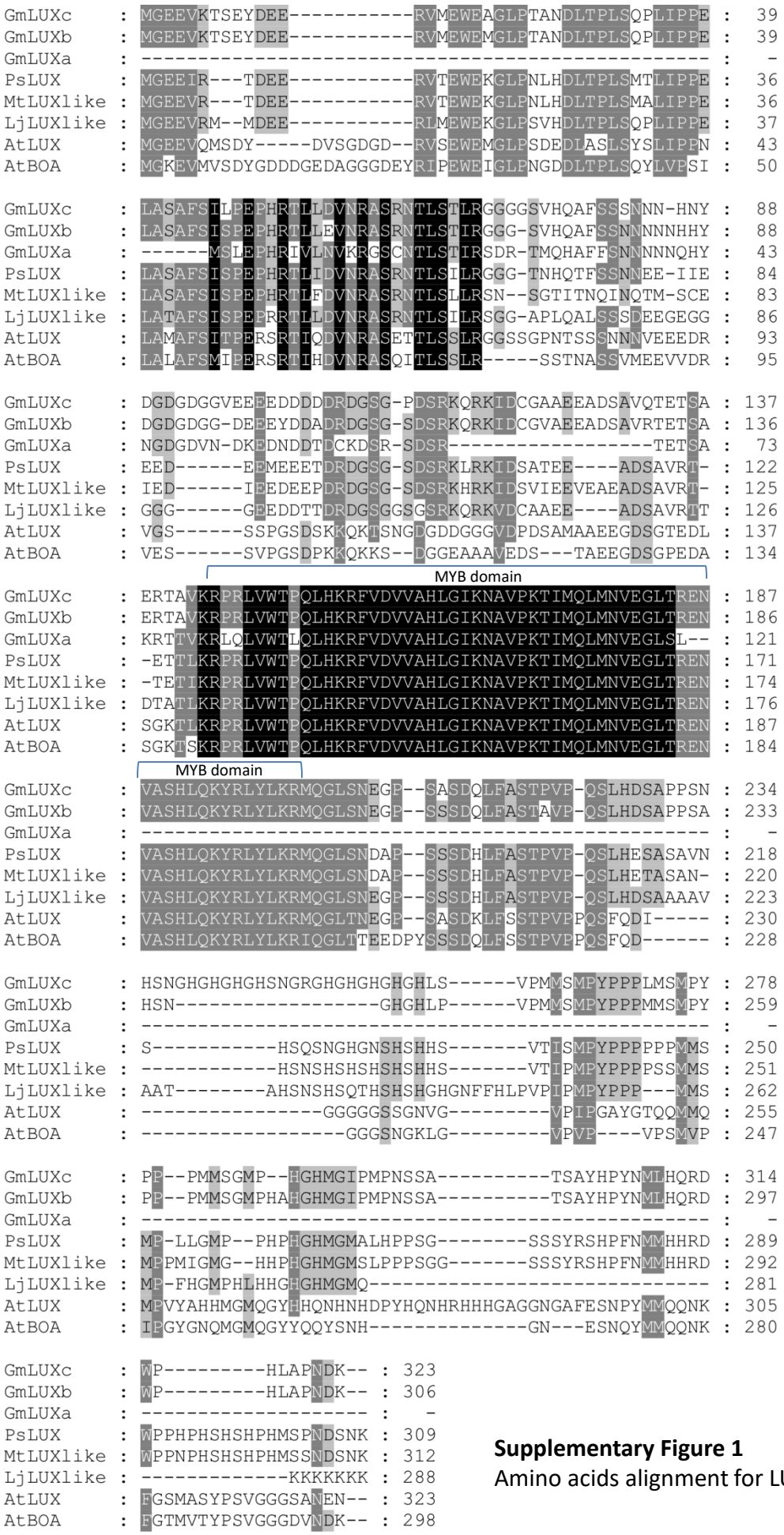
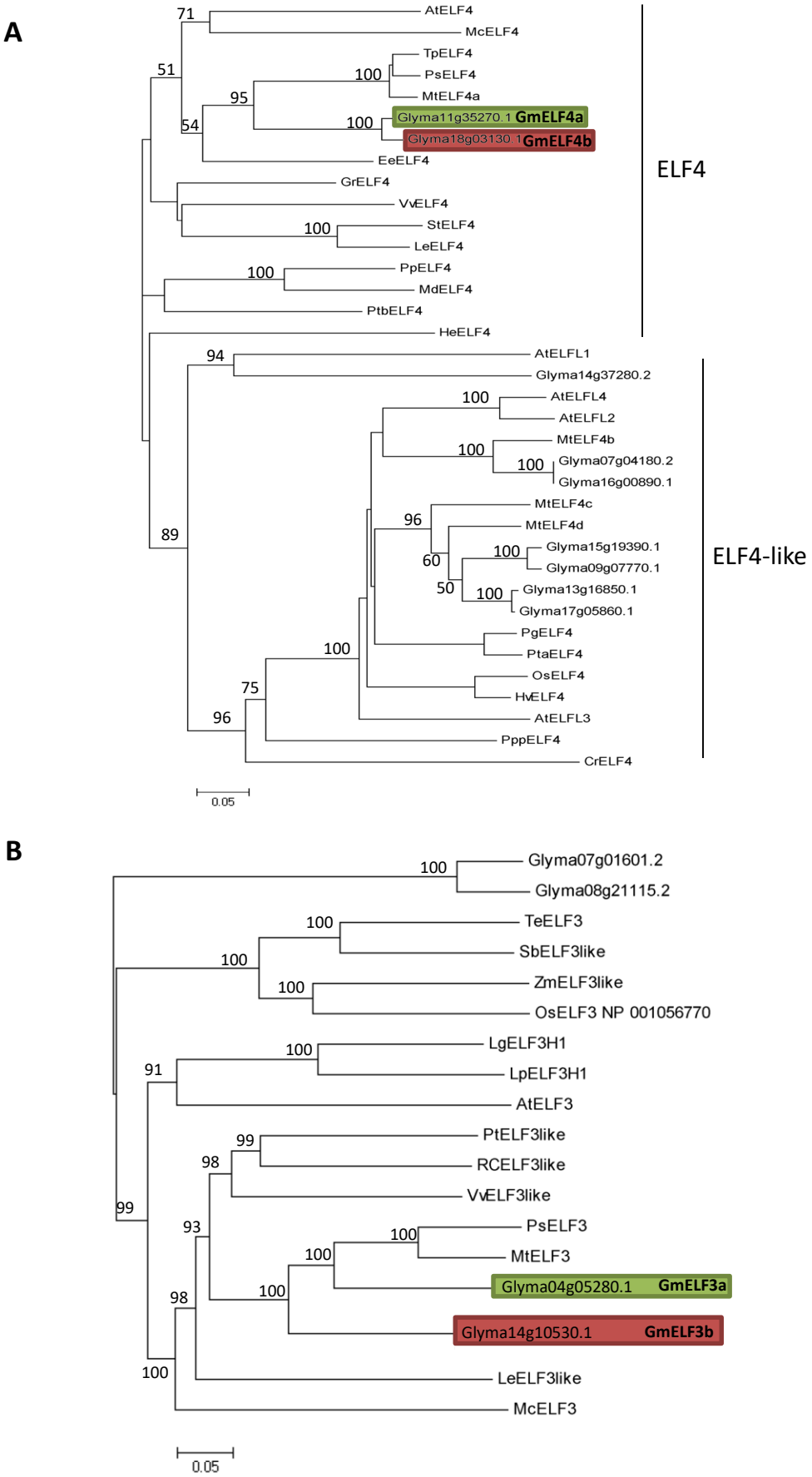
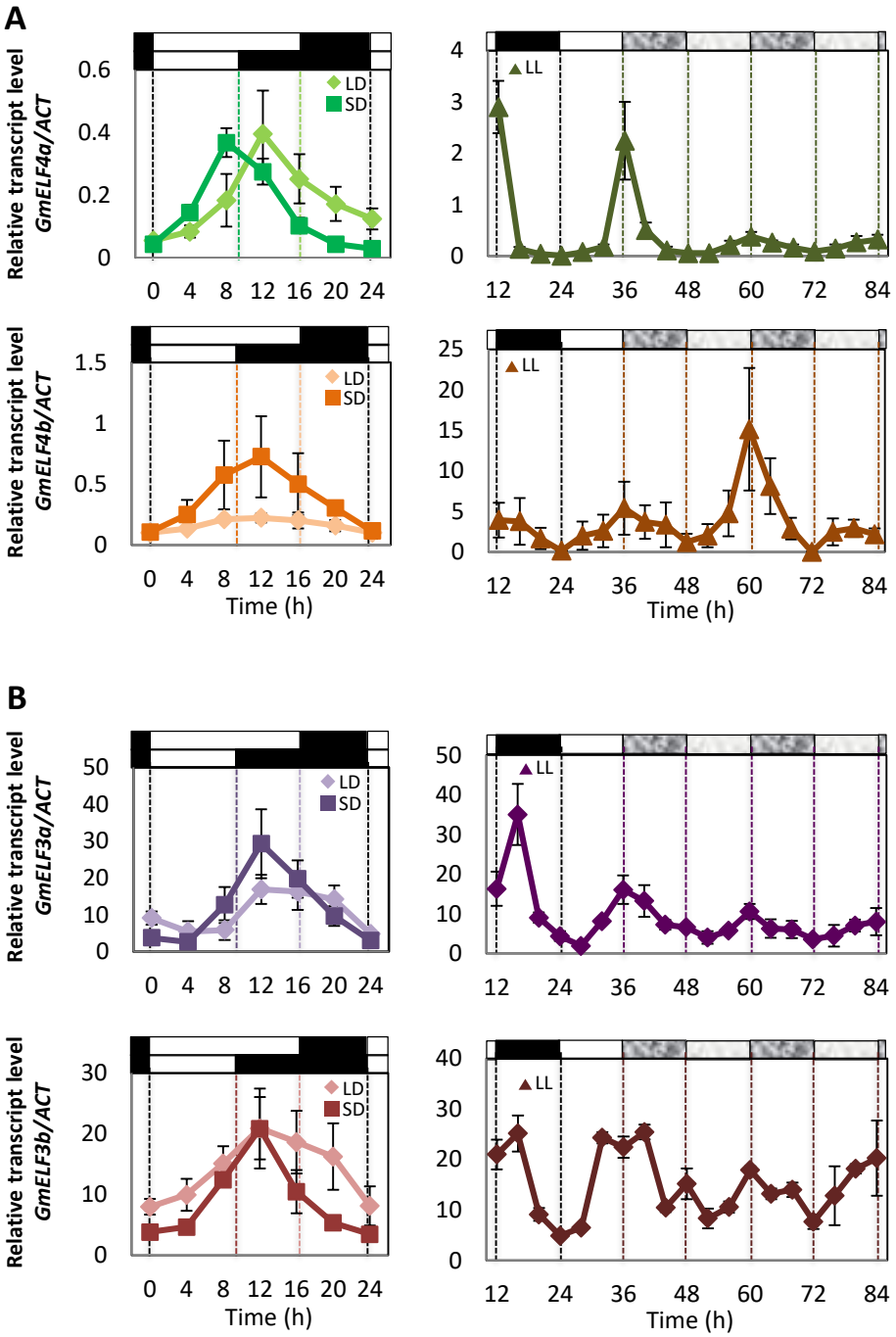


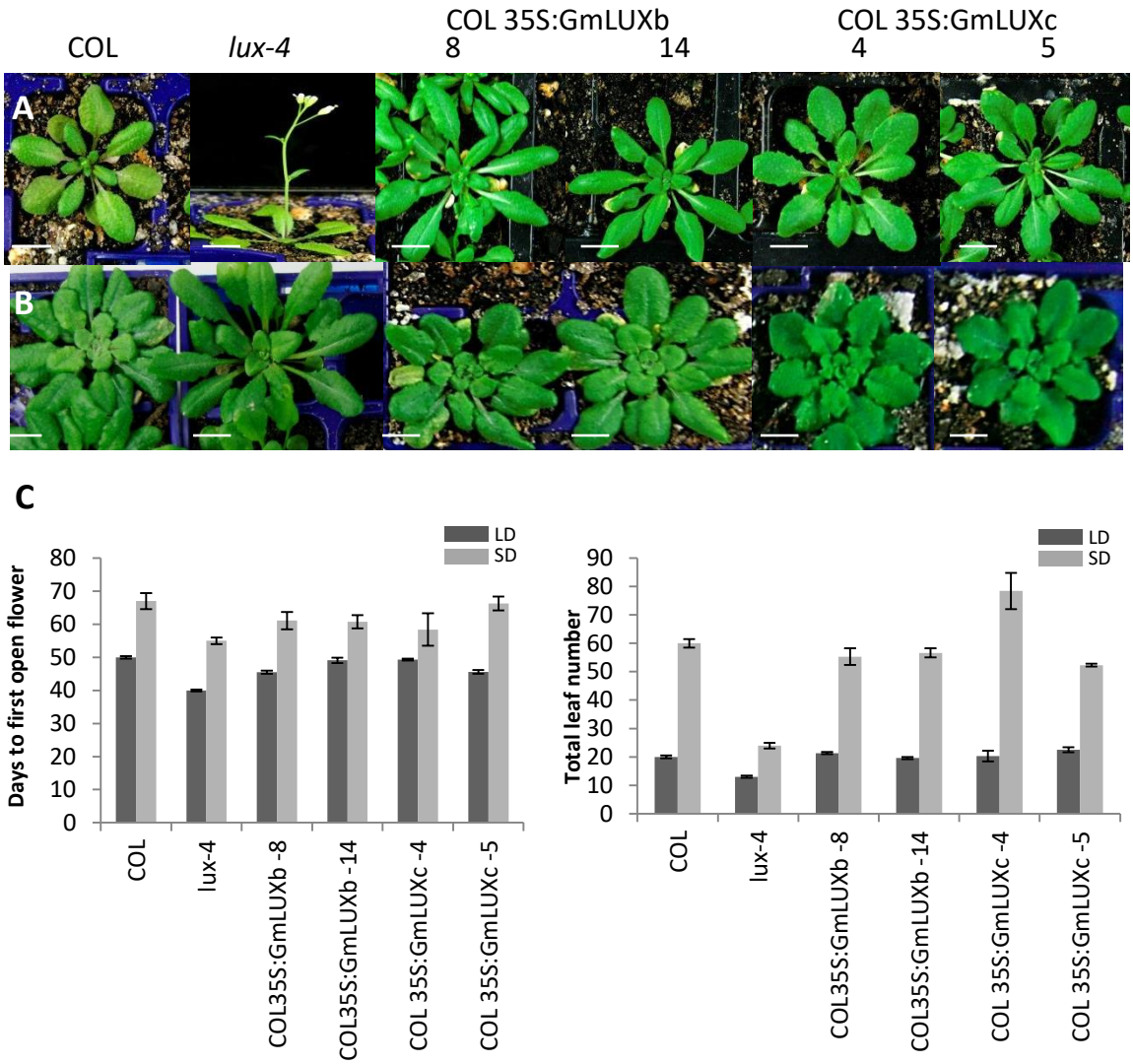
Supplementary Figure 1
Amino acids alignment for LUX-Like protein



Supplementary Figure 2. Phylogenetic analyses of ELF4-like and ELF3-like proteins.

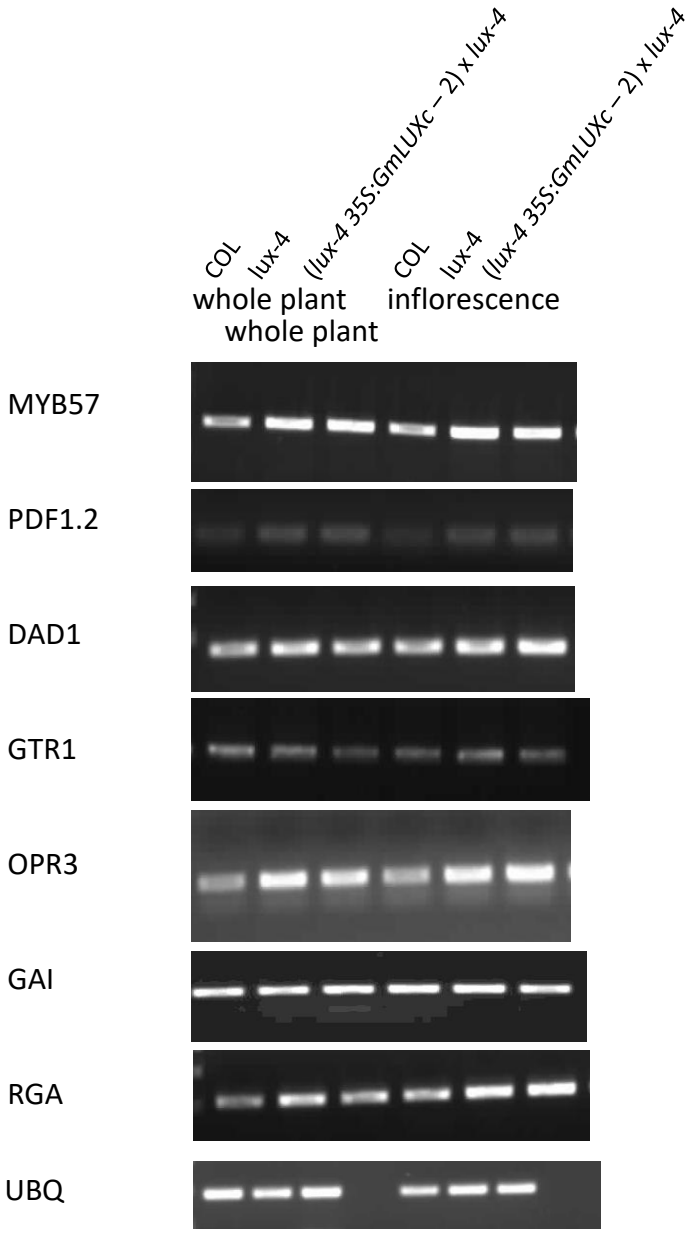


Supplementary Figure 3. **Homologues of soybean *ELF4* and *ELF3* transcripts show diurnal and circadian rhythms.**
(A) *GmELF4a* and *GmELF4b* expression level under long-day long-day (LD; 16h light, 8h dark) or short-day (SD; 10h light, 14h dark), or constant light (LL; 12h light:12h dark then continuous light). **(B)** *GmELF3a* and *GmELF3b* expression level under LD (16L: 8D), SD (10L:14D), or LL (12L: 12D then continuous light). All plants were three weeks old at the time of sampling. Data are mean ± SE for n = three biological replicates, each consisting of pooled material from two plants. Day and night periods are indicated by open and closed bars, respectively, above the graph.



Supplementary Figure 4. Ectopic expression of *GmLUXb* and *GmLUXc* in *Arabidopsis Columbia* (*Col*) show similar phenotype as in *lux-4* mutant.

(A) Representative plants are grown in LD (16L: 8D). **(B)** Representative plants are grown in SD (10L:14D). **(C)** Flowering time of plants grown in LD and SD, data are mean ± SE for n = 15-20.



Supplementary Figure 5. Expression of *MYB57*, *GTR1*, *PDF1*, *DAD1*, *OPR3*, *RGA*, *GAI* genes in *35S::GmLUXc* transgenic plants.

Supplementary Table 1. *Cis*-element analysis of 5' regions of *GmLUXb* and *GmLUXc* in comparison to *AtLUX.*

Response	Site Name	Sequence	AtLUX	GmLUXb	GmLUXc
Circadian	Clock	CAANNNNATC	3	2	4
	CCA1	AAMAATCT	0	0	1
	Evening element	AAAATATCT	1	1	1
	LBS (LUX binding sites)	GATWCG	2	0	1
Gibberellin	TAACA(A/G)A element	TAACA(A/G)A	1	1	1
	TATCCA(C/T) element	TATCCA(C/T)	1	1	0
	pyrimidine box	(C/T)CTTTT(C/T)	7	4	10
Ethylene	GCC element	GCCGCC	1	0	0
	A(A/T)TTCAAA element	A(A/T)TTCAAA	1	0	1
Cytokinin	cytokinin response motif (CRM)	(A/G)GAT(T/C)	30	16	17
Auxin	ABRE	(C/T)ACGTG	3	3	1
	TGTCTC element	TGTCTC	1	1	1
Light	I-box	GATAAGR	1	0	1
	G-box	CACGTG	2	2	0
	H-box	ACCTA(A/C)C(A/C)	1	0	0
	Sp1	CC(G/A)CCC	0	1	1
Sugars	TATCCA element	TATCCA	1	2	0
	SURE	(AA)TACTA(A/T)T	1	0	2
	W-box	(T)TGAC(C/T)	0	1	1
Cold	C-repeat	CCGAC	3	1	0
	LTR	CCGAAA	0	2	1

Supplementary Table 2. Primers sequences used in gene isolation, Real-Time PCR, and construct cloning.

Primer name	Sequence (5'-3')	Uses
ACT-F	ATCATGTTTGAGACCTTCAATGTG	RT-PCR
ACT-R	CTCGAGTTCTTGCTCATAATCTAGG	
LUXb-3F	AATGGCCATGGTCATCTCCC	RT-PCR
LUXb-3R	GCACCTTCTATAACATTGTA	
LUXc-4F	AATGGTCATGGTCATGGGCA	RT-PCR
LUXc-1R	ATGATGGTGATGGCTGACCT	
BamHI-GFP-F	GGATCCATGGTGAGCAAGGGCGAGGAG	pUC18/2x35S::GFP::GmLUXb, 2x35S::GFP::GmLUXc
GFP-NS-XbaI-R	GCTCTAGACTTGTACAGCTCGTCCATG	
LUX-XbaI-F	GCTCTAGAATGGGGGAAGAGC	pUC18/2x35S::GFP::GmLUXb, 2x35S::GFP::GmLUXc
LUX-KpnI-R	CCGGGTACCTCATTTATCATTAG	
LUX-EcoRI-F	CCGGGAATTCATGGGGGAAG	vector pMLBART/35S::GmLUXb or 35S::GmLUXc
LUX-BamHI-R	CGCGGGATCCTCATTTATCA	
CaMV35S-NotI-F	ATTTGCGGCCGCATGGTGGAGCACGAC	pMLBART/35S::GmLUXb or 35S::GmLUXc
polyA-NotI-R	AGGAGCGGCCGCACTGGATTTTGGTTT	
T7 promoter 2	TAATACGACTCACTATAGGGCGA	Yeast-two hybrid cloning
3' BD sequencing 2	AGCAACCTGACCTACAGGAA	
3' AD sequencing	AGATGGTGCACGATGCACAG	
Gal4_N_term_primer	GAGTAGTAACAAAGGTCAA	Yeast-three hybrid cloning
pHybLex_rev_primer	GAGTCACTTTAAAATTTGTATACAC	
AtUBQ10-F	GGCCTTGTATAATCCCTGATGAATAAG	RT-PCR
AtUBQ10-R	AAAGAGATAACAGGAACGGAAACATAGT	
AtGTR1-F	GTCCATTGGCTGGTATTGCT	RT-PCR
AtGTR1-R	ACTTGCTGCAACGTGCATAG	
AtPDF1.2-F	TTTGCTGCTTTCGACGCAC	RT-PCR
AtPDF1.2-R	CGCAAACCCCTGACCATG	
AtDAD1-F	GTGAAGACGAAGAAGAAGAGCAATC	RT-PCR
AtDAD1-R	GTGAAGACAGCGAAAACGACATAC	
AtOPR3-F	TTGGACGCAACTGATTCTGAC	RT-PCR
AtOPR3-R	GTAGGCGTGGTAGCGAGGTT	
AtMYB21-F	AAAATCGCCAAACATCTTCC	RT-PCR
AtMYB21-R	AATTATAACCCCAAACCTCTACAA	
AtMYB24-F	ATGCAAAATGGGGAAATAGGTG	RT-PCR
AtMYB24-R	AAGATCATCGACGCTCCAATAGTT	
AtMYB57-F	GTGCGGCGAGGGAACATAA	RT-PCR
AtMYB57-R	TCAGCAATAGAAAAACCAAATAAC	
AtGA2ox1-F	CGGTTCGGGTCCACTATTTC	RT-PCR
AtGA2ox1-R	ACCTCCCATTTGTCATCACCTG	
AtGA20ox2-F	CCGGCAGAGAAAGAACACGAA	RT-PCR
AtGA20ox2-R	TACGCCTAAACTTAAGCCCAGAA	
AtRGA-F	AGAAGCAATCCAGCAGA	RT-PCR
AtRGA-R	GTGTACTCTCTTCTTACCTTC	
AtGAI-F	CACACGACCGCTCATAG	RT-PCR
AtGAI-R	TGCCTATCCAATTTACCCTC	