

**Table S1.** Details of the 10 conserved motifs of rose CAMTA proteins

Motif	Width(aa)	Motif Sequence
Motif 1	50	CMFGEVEVPAEVIADGWJRCYTPPHVPGRVPFYVTCSNRLPCSEVREFEY
Motif 2	50	DGHRWRKKKDGKTVKEAHERLKVGNVDVLHCYYAHGEDNPNFQRRSYWML
Motif 3	50	GQGVJHLGAALGYDWAILPIITAGVSVNFRDVNGWTALHWAAYFGREKTV
Motif 4	50	WKGRKDFLKIRKRIVKIQAHVRGHQVRKNYRKIVWSVGILEKVILRWRRK
Motif 5	49	LIGLGAAPGAVTDPTSKYPGGKTPADLASEKGHKGIAGYLSEVALTSHL
Motif 6	50	EAKQRWLRPAEICEILQNYKKFQITPEPPNQPPSGSLFLFDRKILRYFRK
Motif 7	36	GPSLSQDQLFSIVDFSPNWAYENSETKVLIVGKFLK
Motif 8	9	HIVLVHYRE
Motif 9	31	LKDSLAAVRNAAQAAARIQAAAFRAHSFRRKQ
Motif 10	18	RVQSMVRSPEAREQYHRL

**Table S2.** Summary of cis-acting elements of *RcCAMTA* genes

Element	Sequence	Description	Number
TGA-element	AACGAC	auxin-responsive element	5
LTR	CCGAAA	cis-acting element involved in low-temperature responsiveness	6
TCA-element	CCATCTTTTT	cis-acting element involved in salicylic acid responsiveness	10
ABRE	ACGTG	cis-acting element involved in the abscisic acid responsiveness	21
ARE	AAACCA	cis-acting regulatory element essential for the anaerobic induction	13
G-box	CACGTG	cis-acting regulatory element involved in light responsiveness	12
CGTCA-motif	CGTCA	cis-acting regulatory element involved in the MeJA-responsiveness	7
O2-site	GATGATGTGG	cis-acting regulatory element involved in zein metabolism regulation	1
GC-motif	CCCCCG	enhancer-like element involved in anoxic specific inducibility	1
MBS	CAACTG	MYB binding site involved in drought-inducibility	5
GATA-motif	GATAGGA	part of a light responsive element	6
P-box	CCTTTTG	gibberellin-responsive element	5

**Table S3.** The sequences of primers used for qRT-PCR.

Gene Name	Forward Primer Sequence (5'-3')	Reverse Primer Sequence (5'-3')	E (%)	R <sup>2</sup>
<i>RcCAMTA1</i>	GGTTGTAGCAGACGGTGTCTTC	TCTTGAATTTGGTTGACTCGGTACTC	95.3	0.996
<i>RcCAMTA2</i>	AGAGGCTCAAGGCTGGAAGTG	CGGTAGTGGACGAGAACAATGTG	94.9	0.987
<i>RcCAMTA3</i>	TGGATGTTGACACTATTATGGAGGAAG	AAGTTCCTGGCTTGACATGGATG	100.6	0.999
<i>RcCAMTA4</i>	TGATGCCAACGAACCCACAAAG	GATTACGCCTTCCTGAATGATCTGAG	95.3	0.993
<i>RcCAMTA5</i>	TGTGCGTAGAGGTGAACCAGTAG	TGTGCGTAGAGGTGAACCAGTAG	96.5	0.997
<i>RcACTIN</i>	AGCGTGGCTATTCCTTCAC	GTACTTCTGGGCAACGGAA	94.6	0.984