

Supplementary Tables for
**Calcium-dependent protein kinase GhCDPK16 exerts a positive
regulatory role in enhancing drought tolerance in cotton**

Table S1. Analysis of *GhCDPK16* promoter.

Table S2. Primer pairs used in this study.

Table S1 Analysis of *GhCDPK16* promoter

Element	Sequence	Number	Function	Type
ACE	CTAACGTATT	1	cis-acting element involved in light responsiveness	Plant growth and development
Box 4	ATTAAT	4	part of a conserved DNA module involved in light responsiveness	Plant growth and development
GA-motif	ATAGATAA	1	part of a light responsive element	Plant growth and development
GATA-motif	AAGGATAAG G	1	part of a light responsive element	Plant growth and development
G-Box	CACG	2	cis-acting regulatory element involved in light responsiveness	Plant growth and development
ABRE	ACGTG	1	cis-acting element involved in the abscisic acid responsiveness	Phytohormone responsive
ERE	ATTTTAAA	6	cis-acting element involved in the ethylene responsiveness	Phytohormone responsive
MYB	AACCA	7	MYB binding sites involved in drought induction	Abiotic and biotic stresses
MYC	CAATTG	1	MYC binding sites involved in drought induction	Abiotic and biotic stresses
STRE	AGGGG	1	stress-response element	Abiotic and biotic stresses
WUN-motif	AAATTCCT	1	wound-responsive element	Abiotic and biotic stresses

Table S2 Primer pairs used in this study

Usage	Primer Name	Sequence (5' - 3')
Construct for overexpression	pBI121-GhCDPK16-F	AGAACACGGGGGACTCTAGAATGAATAAGA AAATTGCAGG
	pBI121-GhCDPK16-R	GATCGGGGAAATTTCGAGCTCTCATTTAATAT CCTGTGTTGGGT
	1305-35S-GhCDPK16-GFP-F	GCCCAGATCAACTAGTATGAATAAGAAAAT TGCAGG
Construct for localization analysis	1305-35S-GhCDPK16-GFP-R	TCGAGACGTCTCTAGATTTAATATCCTGTGT TGGGT
	1305-35S-GFP- GhCDPK16-F	GACGAGCTGTACAGATCTATGAATAAGAAA ATTGCAGG
	1305-35S-GFP- GhCDPK16-R	GCGGCCGCTTTAAGATCTTCATTTAATATCC TGTGTTGGGT
Construct for VIGS analysis	TRV2:GhCDPK16-F	TCTGTGAGTAAGGTTACCGAATTCCCTTGCT GCTACACTGCACA
	TRV2:GhCDPK16-R	CCATGGAGGCCTTCTAGAGAATTCCATACCC CCATCACCCGTTT
	qRT-GhCDPK16-F	CAAGAAAGCCCACAGGTACGGT
RT-qPCR	qRT-GhCDPK16-R	GGTGGTGCCAAATTGACCTTGC
	qRT-GhACT4-F	TTGCAGACCGTATGAGCAAG
	qRT-GhACT4-R	ATCCTCCGATCCAGACACTG
	qRT-GhUBQ7-F	GAATGTGGCGCCGGGACCTTC
	qRT-GhUBQ7-R	ACTCAATCCCCACCAGCCTTCTGG
	qRT-AtSAND-qF	AACTCTATGCAGCATTTGATCCACT
	qRT-AtSAND-qR	TGATTGCATATCTTTATCGCCATC
	qRT-AtNXH1-F	ACCCCAAAAATCCATACATATCCC
	qRT-AtNXH1-R	CCACGACCTCCAAAGACGG
	qRT-AtRD29A-F	ACGTTTGCTCCAAGTGGTGA
	qRT-AtRD29A-R	CCTCCAACGTTATCGGGGTC
	qRT-AtRD29B-F	GGCGGGCAAAGCGAG
	qRT-AtRD29B-R	TGCCCCGTAAGCAGTAACAGATC
	qRT-AtDREB2A-F	GACCTAAATGGCGACGATGT

qRT-AtDREB2A-R	GCGGATCAAAACCACTTTGT
qRT-AtDi19-F	TTCGATCCCGATCTGAAATGT
qRT-AtDi19-R	TCTATGTGACAGCACAAACCC
qRT-GhDi19-F	ATGGATGCTGATTCATGGAGT
qRT-GhDi19-R	TTATAAAATTTTCATCAGGCAT
qRT-GhABA1-F	AAATCGTTTGTGATCGGAAGT
qRT-GhABA1-R	TAGCAACATTTGAAGGTATCCA
qRT-GhABA2-F	GCTCATTGCTTCCAGTCTCCA
qRT-GhABA2-R	TTTTCAGTCAACCCTACCACAGC
qRT-GhAAO3-F	GCAAACCCAAACTACACCCACA
qRT-GhAAO3-R	GCCACAGCCTCCTTCACCA
qRT- GhCDPK1-F	GGAGCCCATACTATGTTGC
qRT- GhCDPK1-R	GCCTTGCTCGCTTTCAG
