

SUPPORTING INFORMATION

Supplemental Table 1. Summary of cotton VIGS efficiency with *GhCLA1* and *AtCLA1* constructs.

Supplemental Figure 1

Amino acid sequence alignment of GhCLA1 and AtCLA1.

Supplemental Figure 2

Leaf photobleaching phenotypes triggered by VIGS-GhCLA1 were shown on different cotton cultivars at different days post Agrobacteria-infiltration.

Supplemental Figure 3

Leaf photobleaching phenotypes triggered by VIGS-AtCLA1 were shown on different cotton cultivars at 18 and 34 days post Agrobacteria-infiltration.

Supplemental Figure 4

The gene expression of *GhVe1*, *GhNDR1*, *GhMKK2* and *GhNPR1* in plant stem tissues by RT-PCR analysis. *GhActin9* was used as a control.

Type of file: table

Label: Table S1

Filename: Supplemental Table 1.doc

Supplemental Table 1. Summary of cotton VIGS efficiency with *GhCLAI* and *AtCLAI* constructs

Cultivar	VIGS gene	Bleaching phenotype	Ratio (Bleached plants/total plants)	Days post VIGS	Note
Deltapine 90	<i>GhCLAI</i>	Whole leaf	100% (21/21)	10 days	100% at 10 days post VIGS
	<i>AtCLAI</i>	Leaf main vein	83% (5/6)	14 days	100% at 16 days post VIGS
R135	<i>GhCLAI</i>	Whole leaf	86% (6/7)	12 days	100% at 14 days post VIGS Slightly weaker than other cultivars
	<i>AtCLAI</i>		0/3	14 days	No obvious bleaching phenotype
Phytogen 480WR	<i>GhCLAI</i>	Whole leaf	100% (13/13)	10 days	100% at 10 days post VIGS
	<i>AtCLAI</i>	Leaf main vein	100% (5/5)	14 days	100% at 14 days post VIGS
Phytogen 425 RF	<i>GhCLAI</i>	Whole leaf	94% (15/16)	10 days	100% at 14 days post VIGS
	<i>AtCLAI</i>	Leaf main vein	100% (10/10)	14 days	Slightly weaker than Deltapine 90 and 480WR. Some anthocyanin accumulated along the vein
Fibermax 832	<i>GhCLAI</i>	Whole leaf	75% (3/4)	10 days	100% at 12 days post VIGS
PSC355	<i>GhCLAI</i>	Whole leaf	88.9% (8/9)	10 days	100% at 14 days post VIGS