

Table S1 Primers for the characteristic of cotton Shaker K⁺ channel family genes

Primer	Sequence (5'→3')
Primers for qRT-PCR	
<i>GhActin9</i> -F	GCCTTGGACTATGAGCAGGA
<i>GhActin9</i> -R	AAGAGATGGCTGGAAGAGGA
<i>GhAKT1aD</i> -F	CGTTCATCATTGGACACCG
<i>GhAKT1aD</i> -R	TGGACGGGATTGGCTACAT
<i>GhAKT1bD</i> -F	GTTGCGTTCGTATGGCTTGTT
<i>GhAKT1bD</i> -R	CCAGGATCACGGTATCTCGC
<i>GhAKT1cD</i> -F	GAGAGAAAGCAGCCATTACAGC
<i>GhAKT1cD</i> -R	CTCCAATGGTGAAACCCAAG
<i>GhAKT1dD</i> -F	GTTTCGTGGCGTTTCTAATGAC
<i>GhAKT1dD</i> -R	TTGCCTCTCCAACAACCTG
<i>GhKAT1aD</i> -F	ATGTGTAGCCTTGAGTATTC
<i>GhKAT1aD</i> -R	ACAGATCCAGGCAGAGTAAA
<i>GhKAT1bD</i> -F	ATGTGATTACAGGTTACG
<i>GhKAT1bD</i> -R	TTCCTCCCATTTGCTCCTTGC
<i>GhAKT2aD</i> -F	TCCAAGGGTGGGCATCTAT
<i>GhAKT2aD</i> -R	CTGCTTCATCTGTTACAATGGC
<i>GhAKT2bD</i> -F	GGCGTTTCTCAGTTCATCG
<i>GhAKT2bD</i> -R	CCCACTCTGCTATTGCCAGT
<i>GhKAT3aD</i> -F	GCCCAACACCTATTCTGGAA
<i>GhKAT3aD</i> -R	ACTGCTCCGTCCCATTCTT
<i>GhKAT3bD</i> -F	GCCACAGCCATACACAGTTAGG
<i>GhKAT3bD</i> -R	TCATTGTTTCCTTCCTCGGG
<i>GhSKORaD</i> -F	CAATGGTGTGGATAGATTACGG
<i>GhSKORaD</i> -R	TCTCTGAAGTCCTCAACCTCG
<i>GhGORKaD</i> -F	CCGAACACCACTTCATGTTG
<i>GhGORKaD</i> -R	TTCTCCCCTCGAATTGTTG

Primers for VIGS vectors

PYL156- <i>GhKAT1aD</i> -F	CGGGGTACCGTGGAAC TTCACTGATGAAC
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PYL156- <i>GhKAT1aD</i> -R	TCCCCCGGGAACACTTTTGGTGTCTTCC
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Primers for yeast complementation vectors

p416-GPD- <i>GhKAT1aD</i> -F	CTTAGTTTCGACGGATTCTAGAATGTGTAGCCTTGAGTATT C
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p416-GPD- <i>GhKAT1aD</i> -R	ATATCGAATTCCTGCAGCCCGGGGTCGCATTGAAACCTA CA
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Primers for subcellular localization protein expression vector

pHBT- <i>GhKAT1aD</i> -F	CTAGTCTAGAATGTGTAGCCTTGAGTATTC
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pHBT- <i>GhKAT1aD</i> -R	TCCCCCGGGGTCGCATTGAAACCTACATT
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