

Table S1. Primers used in this study

Primer name	Primer ssequence (5'→3')
IbActin-F:	AGCAGCATGAAGATTAAGGTTGTAGCAC
IbActin-R:	TGGAAAATTAGAAGCACTTCCTGTGAAC
KIbB1-qPCR-F:	ACCCGATAGTAGGTTTGCAC
KIbB1-qPCR-R:	AATCTGGGCGCTTTGG
KIbB1-SacI-F:	CGAGCTCATGGATTATGTGGACTTGATCTACT
KIbB1-XbaI-R:	GCTCTAGAGCGATAAGAATCTGGGCGC
KIbB1-T-F:	GGTCGCGGAGGCTATGGATGC
KIbB1-T-R:	GCTTCTGCGGGCGATTTGTGT
Atactin-F	GCACCCTGTTCTTCTTACCGA
Atactin-R	AGTAAGGTCACGTCCAGCAAGG
AtCAT-F	GCAACTACCCCGAGTGGAAG
AtCAT-R	TGTTTCAGAACCAAGCGACCA
AtGPX8-F	ATGGCGACGAAGGAACCAG
AtGPX8-R	ATCGCCGAAGATTCCTCCATT
AtP5CS-F	ATGATCTTATTTATGTTCTGC
AtP5CS-R	CACTATCTTCCGTCCTAT
AtP5CR-F	AGTTTAGCTTCACAGACCGTTC
AtP5CR-R	GCTCTGTGAGAGCTCGCGGCTTC
AtDHAR-F	ATGGTCCTTTTATCGCCGGG
AtDHAR-R	GCCCATCCAGAGATCACACA
AtAPX-F	CTCTGGGACGATGCCACAAG
AtAPX-R	CTCGACCAAAGGACGGAAAA
AtPOD-F	TCCGGGAGCCACACCATTGG
AtPOD-R	TGGTCGGAATTCAACAG
AtSOD-F	ATGAGAAGTTCTATGAAGAG
AtSOD-R	GTCTTTATGTAATCTGGT

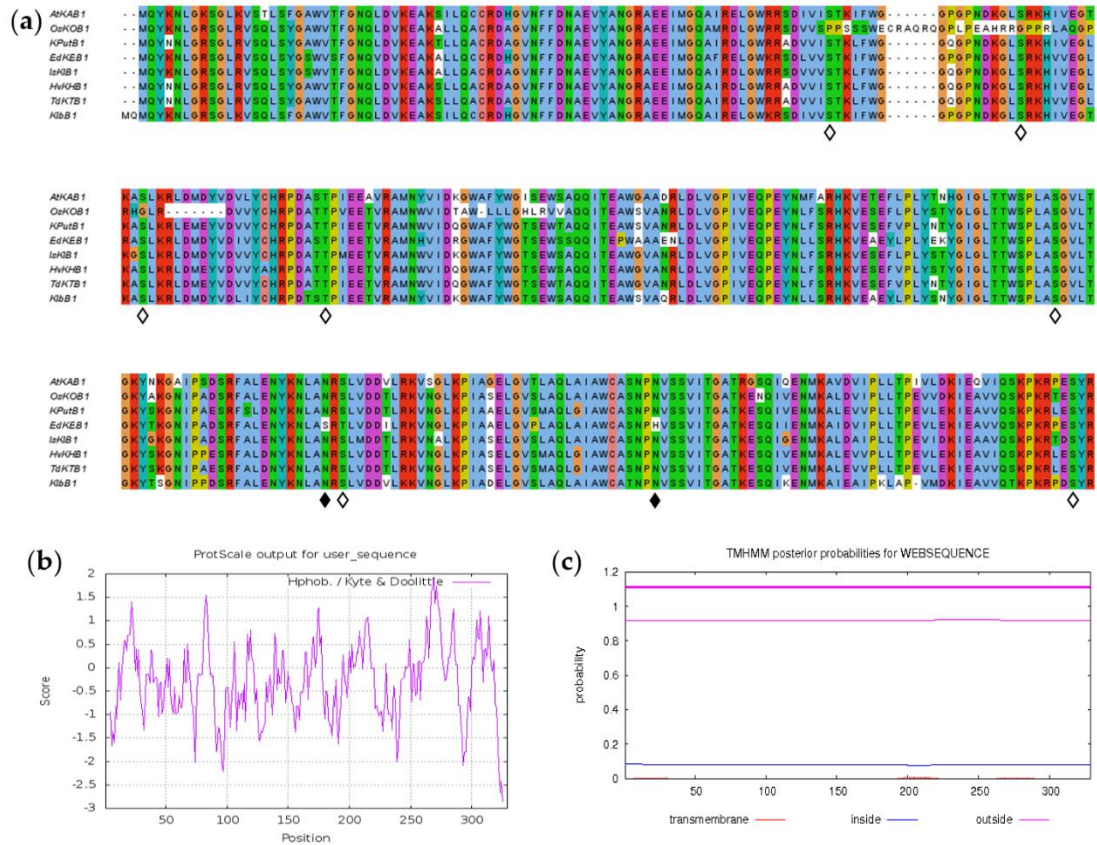


Figure S1. Amino acid sequence analysis of KibB1. (a) Multiple amino acid sequence alignment of KibB1 with homologs from NCBI. (b) The polarity prediction of KibB1. The positive value indicated hydrophobicity and the negative value indicated hydrophilicity. (c) Transmembrane domain prediction of KibB1.

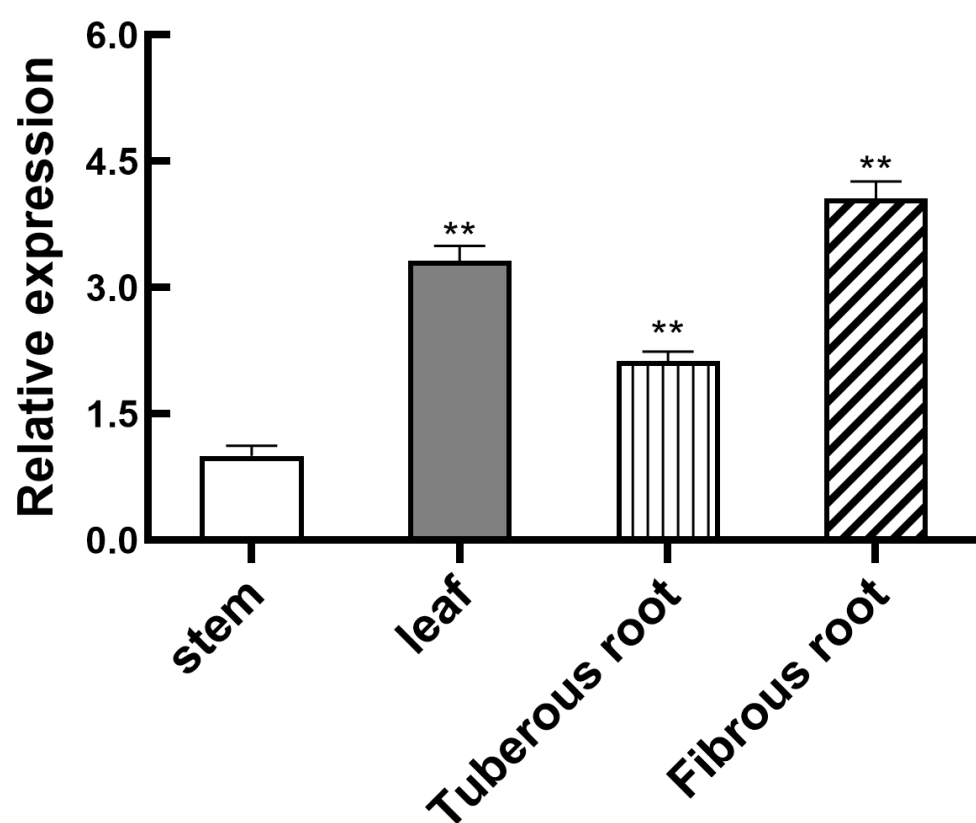


Figure. S2 Expression analysis of *KlbB1* in different tissues. Data are presented as means \pm SE (n = 3). ** indicated a significant difference at $p < 0.01$.

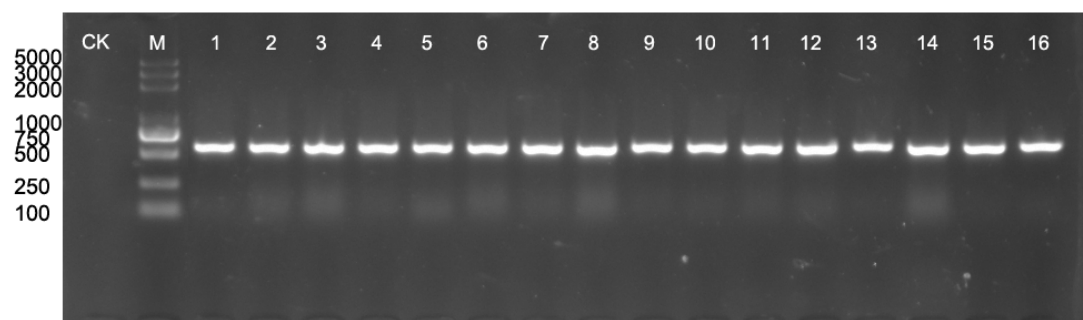


Figure S3. PCR identification of *KlbB1* transgenic plants. M, DNA marker; CK, negative control; 1-16, candidate transgenic plants.