

[illegible]

(A) The nucleotide sequence and amino acid sequence of DgWRKY6. Note: ATG: start codon; TAA :stop codon. **(B)** Phylogenetic tree of DgWRKY6 and other species WRKY proteins. DgWRKY6 is highlight with a red frame. Sequence details are as follows: *BhWRKY6* (*Bidens hawaiiensis* XP_076896643.1); *BhWRKY6* (*Bidens hawaiiensis* XP_076948437.1); *HaWRKY6* (*Helianthus annuus* KAJ0705345.1); *CcsWRKY6* (*Cynara cardunculus* var. scolymus XP_024991487.1); *AlWRKY6* (*Atractylodes lancea* XZP16159.1); *AaWRKY6* (*Artemisia annua* PWA65018.1); *DgWRKY6* (*Dendranthema grandiflorum* var. Jinba. PX890884.1); *AaWRKY6* (*Artemisia annua* PWA98304.1); *EcWRKY6* (*Erigeron canadensis* XP_043634609.1); *RIWRKY* (*Rutidosis leptorrhynchoides* XP_071734362.1). **(C)** The alignment of DgWRKY6 with related proteins from different species. Specific motifs in the protein sequence are highlighted in the figure, and the WRKY domain is clearly marked.

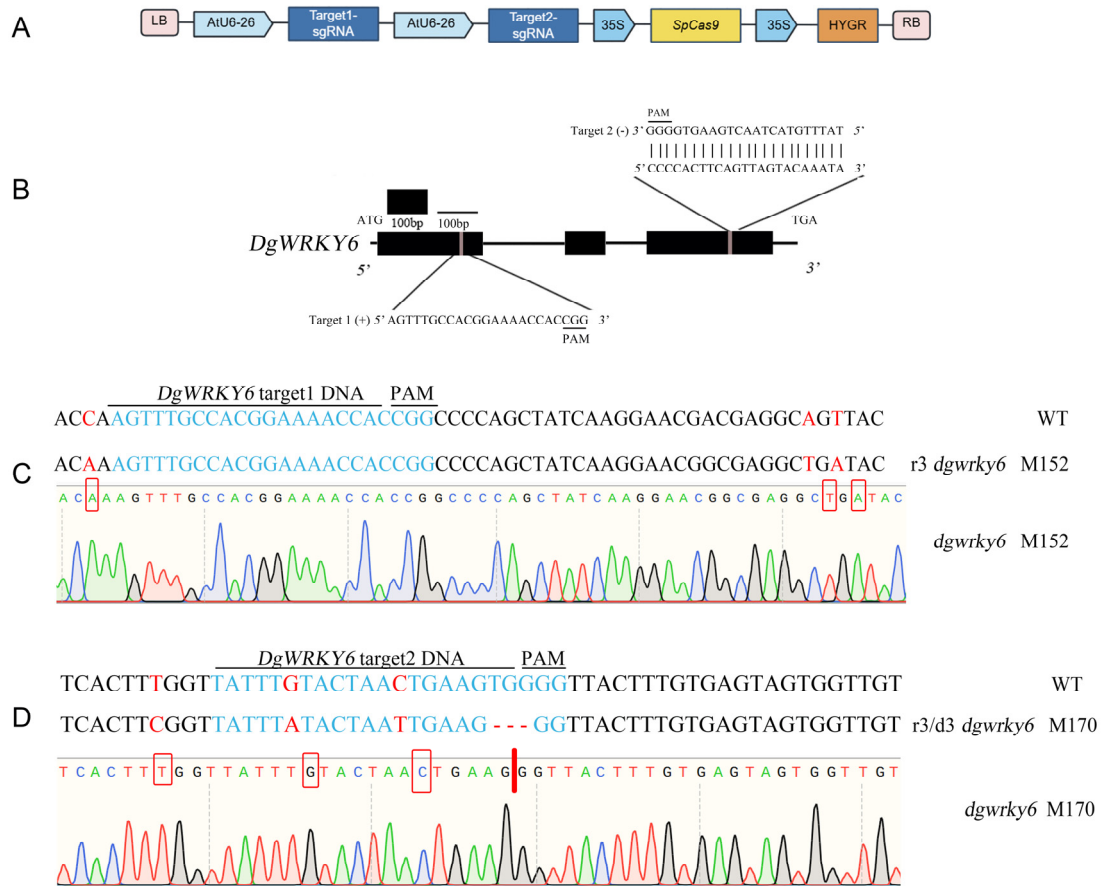


Figure S2 CRISPR/Cas9-mediated mutation in *DgWRKY6*.

(A) Construction of vector. (B) Diagram of the target site in the genomic region of *DgWRKY6*. The Black box indicate exons. Black fine lines indicate introns. (C) Target detection in *dgwrky6* (KO152, KO-170) mutant lines.

The target sequence is shown in red dashes indicate deletions, while red letters indicate substitution.