

**Characterization of a common wheat (*Triticum aestivum* L.)
TaSnRK2.7 gene involved in abiotic stress responses**

Hongying Zhang^{1, 2, §} Xinguo Mao^{1, §} Ruilian Jing^{1, *} Xiaoping Chang¹ and Huimin Xie²

1. The National Key Facility for Crop Gene Resources and Genetic Improvement,
Institute of Crop Science, Chinese Academy of Agricultural Sciences, Beijing 100081,
China

2. College of Agronomy, Northwest A & F University, Yangling 712100, Shaanxi,
China

§ These authors contributed equally to this work

* Corresponding author: Ruilian Jing

Tel/Fax: 86-10-82105829

Email: jingrl@caas.net.cn

Supplementary materials

Fig. S1 Identification of *TaSnRK2.7* transformed *Arabidopsis* plants. (A) Determination of green fluorescence in roots of transgenic *Arabidopsis* plants. Assays were performed at the seedling stage with a laser-scanning confocal microscope. Images were taken in dark field for green fluorescence, and the root outline and combination are in bright field. (B) RT-PCR analysis of transgenic plants. M: 200-bp ladder; Lanes 1-9, p35S-*TaSnRK2.7-GFP-NOS* transformed plants; Lane 10, wild-type *Arabidopsis* (negative control); Lane 11, p35S-*GFP-NOS* transformed plant (negative control); Lane 12, p35S-*TaSnRK2.7-GFP-NOS* plasmid DNA (positive control). (C) Expression levels of *TaSnRK2.7* in transgenic *Arabidopsis* lines L1-L6. The lowest expression of *TaSnRK2.7* in L4 was regarded as standard.

Fig. S2 Morphological characterization of *TaSnRK2.7* plants. (A) Comparison of seed germination and seedlings between *TaSnRK2.7* transformants and controls grown on MS medium. (B) Phenotypes of mature transgenic lines and WT grown in soil (4 weeks). (C) Grain yields of *TaSnRK2.7* and WT plants. The seeds of transgenic *TaSnRK2.7* and WT plants cultured under well-watered conditions were harvested separately. The grain yield of each plant was measured after dehydration, and there were no significant differences. L1-L6, six individual *TaSnRK2.7* transgenic lines; WT, wild type; GFP, *GFP* transgenic line. Values are mean \pm SE, n=10.

Fig. S1

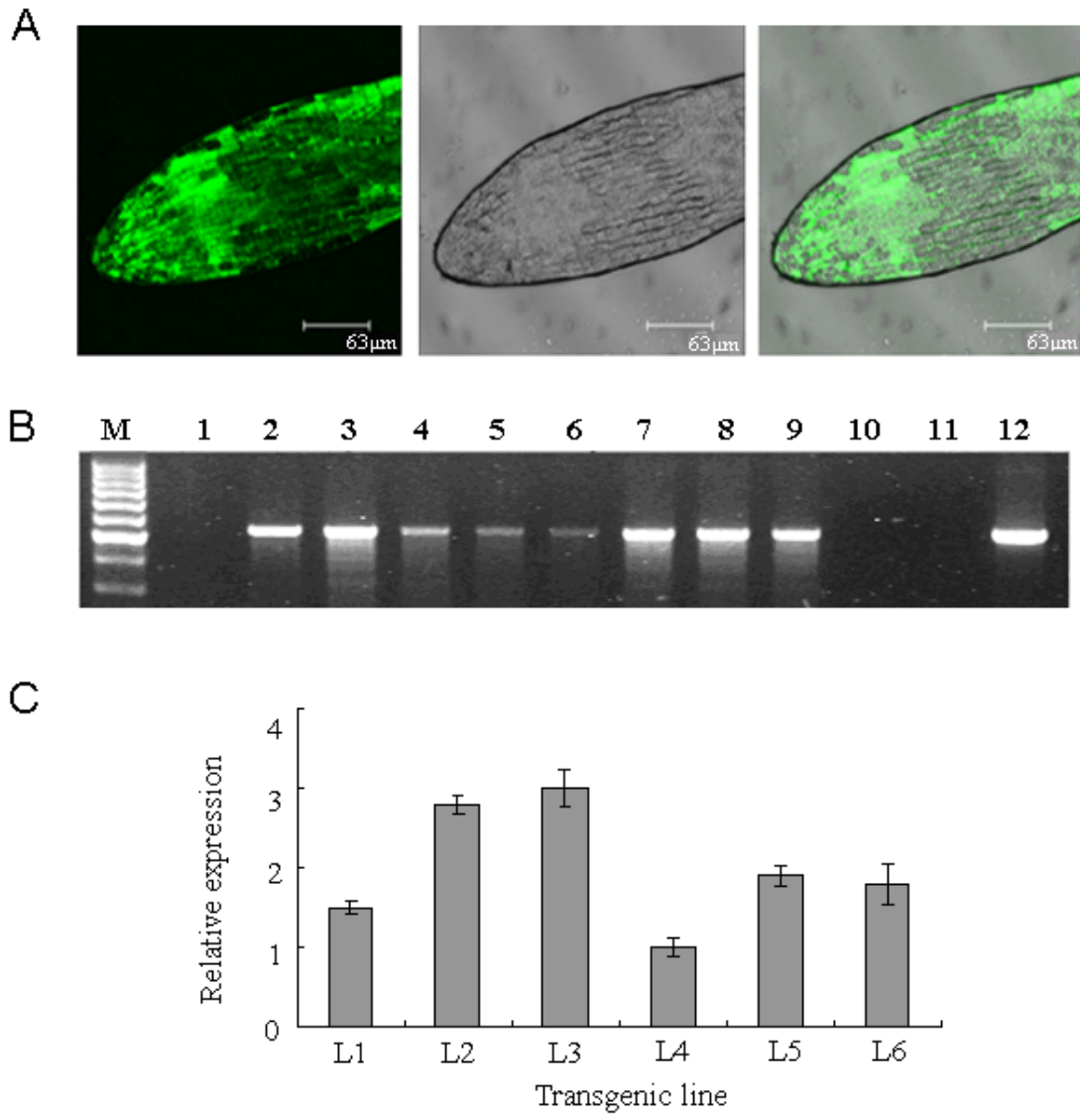


Fig. S2

