Accepted Manuscript

Title: ShCIGT, a Trihelix family gene, mediates cold and drought tolerance by interacting with SnRK1 in tomato

Authors: Chuying Yu, Lulu Song, Jianwen Song, Bo Ouyang, Lijie Guo, Lele Shang, Taotao Wang, Hanxia Li, Junhong Zhang, Zhibiao Ye



S0168-9452(17)30703-3
https://doi.org/10.1016/j.plantsci.2018.02.012
PSL 9755
Plant Science
30-7-2017
9-12-2017
11-2-2018

Please cite this article as: Chuying Yu, Lulu Song, Jianwen Song, Bo Ouyang, Lijie Guo, Lele Shang, Taotao Wang, Hanxia Li, Junhong Zhang, Zhibiao Ye, ShCIGT, a Trihelix family gene, mediates cold and drought tolerance by interacting with SnRK1 in tomato, Plant Science https://doi.org/10.1016/j.plantsci.2018.02.012

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ShCIGT, a Trihelix family gene, mediates cold and drought tolerance by interacting with SnRK1 in tomato

Chuying Yu, Lulu Song, Jianwen Song, Bo Ouyang, Lijie Guo, Lele Shang, Taotao Wang, Hanxia Li, Junhong Zhang^{*}, Zhibiao Ye^{*}

Key Laboratory of Horticultural Plant Biology, Ministry of Education, Huazhong Agricultural University, Wuhan 430070, China.

Chuying Yu: yuchuying@webmail.hzau.edu.cn

Lulu Song: songlulu2010@163.com

Jianwen Song: songjianwen200@webmail.hzau.edu.cn

Bo Ouyang: bouy@mail.hzau.edu.cn

Lijie Guo: trista901117@sina.com

Lele Shang: mushamber@126.com

Taotao Wang: ttwang@mail.hzau.edu.cn

Hanxia Li: hxli@mail.hzau.edu.cn

Junhong Zhang: zhangjunhng@mail.hzau.edu.cn

Zhibiao Ye: zbye@mail.hzau.edu.cn

* Correspondences: ZhibiaoYe, zbye@mail.hzau.edu.cn

Junhong Zhang, zhangjunhng@mail.hzau.edu.cn

Tel: +86 27 87286867 Fax: +86 27 87280016

Highlights

- *ShCIGT*-OE enhances abiotic stress tolerance in transgenic tomato plants;
- *ShCIGT*-OE reduced sensitivity to ABA during post-germination growth;
- ShCIGT interacts with SnRK1 in response to abiotic stresses in tomato.

Abstract

Abiotic stress, such as drought and cold stress, have a major impact on plant growth and development. The trihelix transcription factor family plays important roles in plant morphological development and adaptation to abiotic stresses. In this study, we Download English Version:

https://daneshyari.com/en/article/8356643

Download Persian Version:

https://daneshyari.com/article/8356643

Daneshyari.com