

Accepted Manuscript

Title: Interactions of ABA signaling core components (SIPYLs, SIPP2Cs, and SISnRK2s) in tomato (*Solanum lycopersicon*)

Author: Pei Chen Yu-Fei Sun Wen-Bin Kai Bin Liang Yu-Shu
Zhang Xia-Wan Zhai Li Jiang Yang-Wei Du Ping Leng



PII: S0176-1617(16)30160-2
DOI: <http://dx.doi.org/doi:10.1016/j.jplph.2016.07.016>
Reference: JPLPH 52424

To appear in:

Received date: 30-3-2016
Revised date: 13-7-2016
Accepted date: 15-7-2016

Please cite this article as: Chen Pei, Sun Yu-Fei, Kai Wen-Bin, Liang Bin, Zhang Yu-Shu, Zhai Xia-Wan, Jiang Li, Du Yang-Wei, Leng Ping. Interactions of ABA signaling core components (SIPYLs, SIPP2Cs, and SISnRK2s) in tomato (*Solanum lycopersicon*). *Journal of Plant Physiology* <http://dx.doi.org/10.1016/j.jplph.2016.07.016>

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.

Interactions of ABA signaling core components (SIPYLs, SIPP2Cs, and SLSnRK2s) in tomato (*Solanum lycopersicon*)

Authors: Pei Chen¹, Yu-Fei Sun¹, Wen-Bin Kai¹, Bin Liang¹, Yu-Shu Zhang¹, Xia-Wan Zhai¹, Li Jiang, Yang-Wei Du and Ping Leng^{1,*}

Institution: ¹ College of Agronomy and Biotechnology, China Agricultural University, Beijing 100193, PR China

Running title: Interactions of ABA signaling core components

Ping Leng: * To whom correspondence should be addressed.

E-mail: pleng@cau.edu.cn Tel/Fax: 086-010-62731638

Address: No.2 West Yuanmingyuan Road, Beijing 100193, PR China

Abstract

Abcisic acid (ABA) regulates fruit development and ripening via its signaling. However, the exact role of ABA signaling core components in fruit have not yet been clarified. In this study, we investigated the potential interactions of tomato (*Solanum lycopersicon*) ABA signaling core components using yeast two-hybrid analysis, with or without ABA at different concentrations. The results showed that among 12 PYR/PYL/RCAR ABA receptors (SIPYLs), SIPYL1, SIPYL2, SIPYL4, SIPYL5, SIPYL 7, SIPYL8, SIPYL9, SIPYL10, SIPYL11, and SIPYL13 were ABA-dependent receptors, while SIPYL3 and SIPYL12 were ABA-independent receptors. Among five SIPP2Cs (type 2C protein phosphatases) and seven SLSnRK2s (subfamily 2 of SNF1-related kinases), all SLSnRK2s could interact

Download English Version:

<https://daneshyari.com/en/article/8387110>

Download Persian Version:

<https://daneshyari.com/article/8387110>

[Daneshyari.com](https://daneshyari.com)