



# Molecular cloning and expression analysis of jasmonic acid dependent but salicylic acid independent *LeWRKY1*

M. Lu<sup>1</sup>, L.F. Wang<sup>3</sup>, X.H. Du<sup>3</sup>, Y.K. Yu<sup>2</sup>, J.B. Pan<sup>1</sup>, Z.J. Nan<sup>1</sup>, J. Han<sup>1</sup>, W.X. Wang<sup>1</sup>, Q.Z. Zhang<sup>1</sup> and Q.P. Sun<sup>1</sup>

<sup>1</sup>Plant Science and Technology College, Beijing University of Agriculture, Beijing, China

<sup>2</sup>Center of Tissue Culture, Beijing University of Agriculture, Beijing, China

<sup>3</sup>School of Life Sciences, Shandong Normal University, Jinan, China

Corresponding author: Q.P. Sun

Email: sunqp@bac.edu.cn

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**ABSTRACT.** Various plant genes can be activated or inhibited by phytohormones under conditions of biotic and abiotic stress, especially in response to jasmonic acid (JA) and salicylic acid (SA). Interactions between JA and SA may be synergistic or antagonistic, depending on the stress condition. In this study, we cloned a full-length cDNA (*LeWRKY1*, GenBank accession No. FJ654265) from *Lycopersicon esculentum* by rapid amplification of cDNA ends. Sequence analysis showed that this gene is a group II WRKY transcription factor. Analysis of *LeWRKY1* mRNA expression in various tissues by qRT-PCR showed that the highest and lowest expression occurred in the leaves and stems, respectively. In addition, *LeWRKY1* expression was induced by JA and *Botrytis cinerea* Pers., but not by SA.

**Key words:** *LeWRKY1*; Jasmonic acid; Salicylic acid; *Botrytis cinerea*