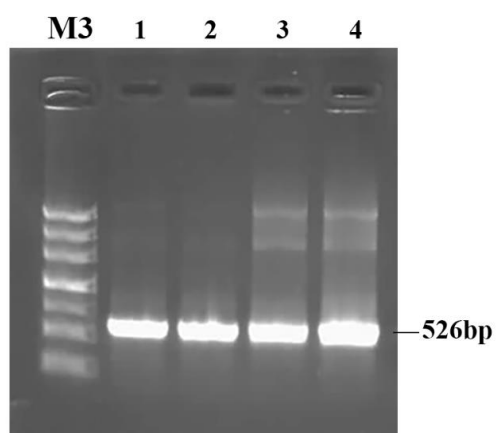
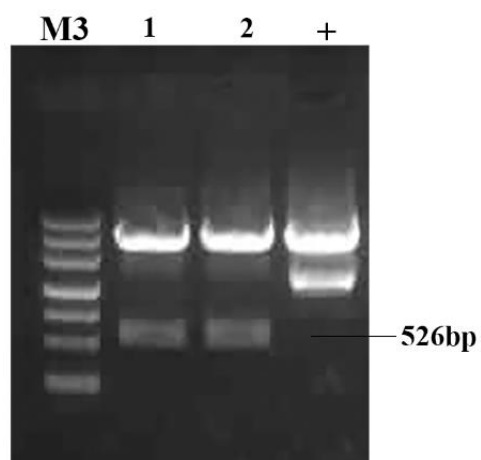


## Supplementary Material

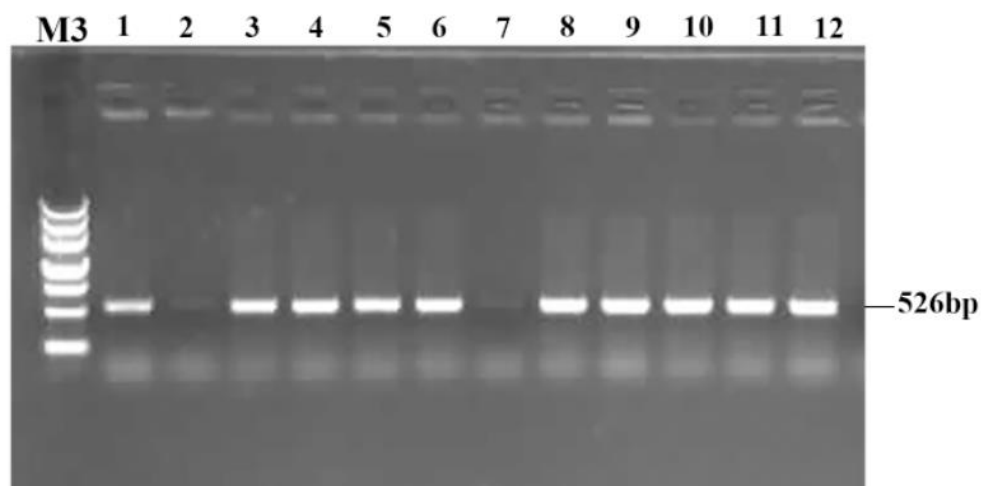
### Supplementary Figures



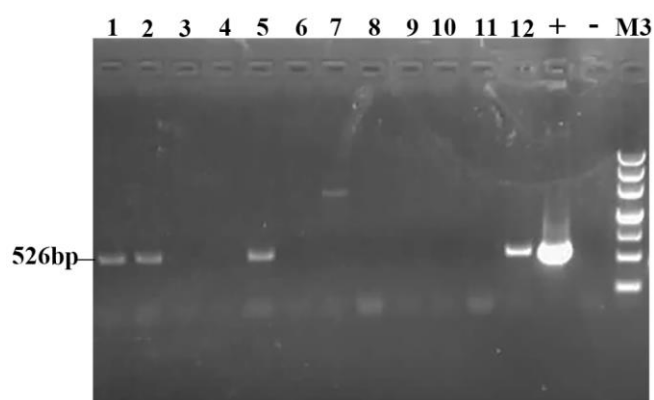
**Supplemental Figure S1.** Cloning the *LEA5* gene from *Saussurea involucrate*. Numbers 1-4 indicate the SiLEA5 gene cloned from *Saussurea involucrate*'s cDNA.



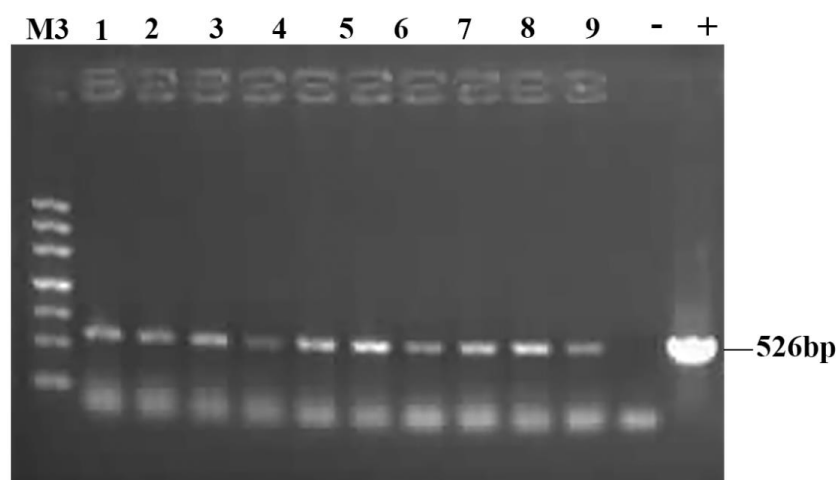
**Supplemental Figure S2.** Identification of recombinant plasmids by enzyme digestion. Numbers 1-2 indicate using BamH I and Sal I enzyme to identify recombinant plasmid. "+" the plasmid without adding BamH I and Sal I as control.



**Supplemental Figure S3.** Identification of *Agrobacterium tumefaciens* by PCR. Numbers 1-12 indicate monoclonal.

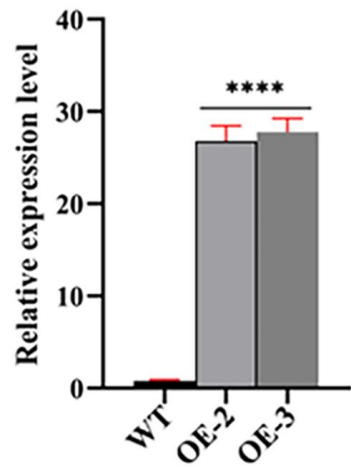


**Supplemental Figure S4.** Characterization of transgenic tomato through DNA PCR. Numbers 1-12 indicate individual transgenic plant lines, "+" the plasmid used as a positive control, and "-" the non-transgenic plants used as a negative control.



**Supplemental Figure S5.** Characterization of transgenic tomato expressing *SiLEA5*

through RT-PCR. Numbers 1-9 indicate individual transgenic plant lines, “+” the plasmid used as a positive control, and “-” the non-transgenic plants used as a negative control.



**Supplemental Figure S6.** Real-time PCR was used to detect wild type and transgenic tomatoes.

**Supplementary Table**

**Table S1.** List of primers used in this study.

Primer name	Primer sequence (5′–3′)	Purpose
<i>SiLEA5</i> -F	CCACCTATCAACTACAAAACCTC	Cloning
<i>SiLEA5</i> -R	TCCGCATAAACTACTGTTAGCT	Cloning
<i>SiLEA5</i> -F(Q)	GGTCAGATTTGGACGCTAGAG	qPCR
<i>SiLEA5</i> -R(Q)	GATACCCTTCAGTTCCCAGC	qPCR
<i>GAPDH</i> -F(Q)	TAGCAAGGATGCTCCCATGTTCGT	qPCR
<i>GAPDH</i> -R(Q)	AAAGGAGCAAGGCAGTTGGTTGTG	qPCR