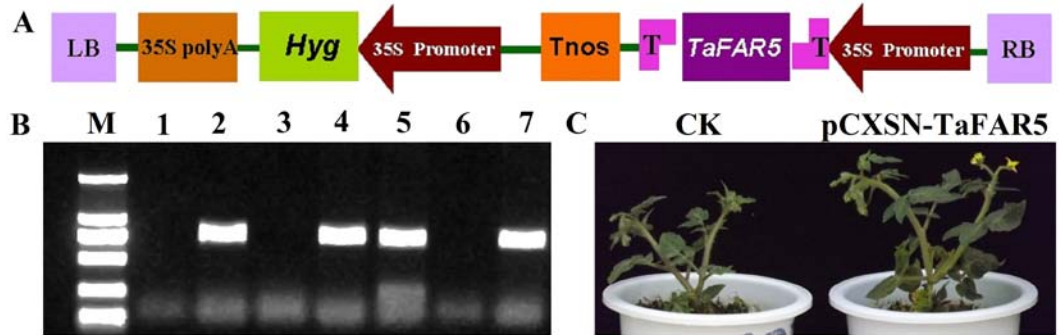
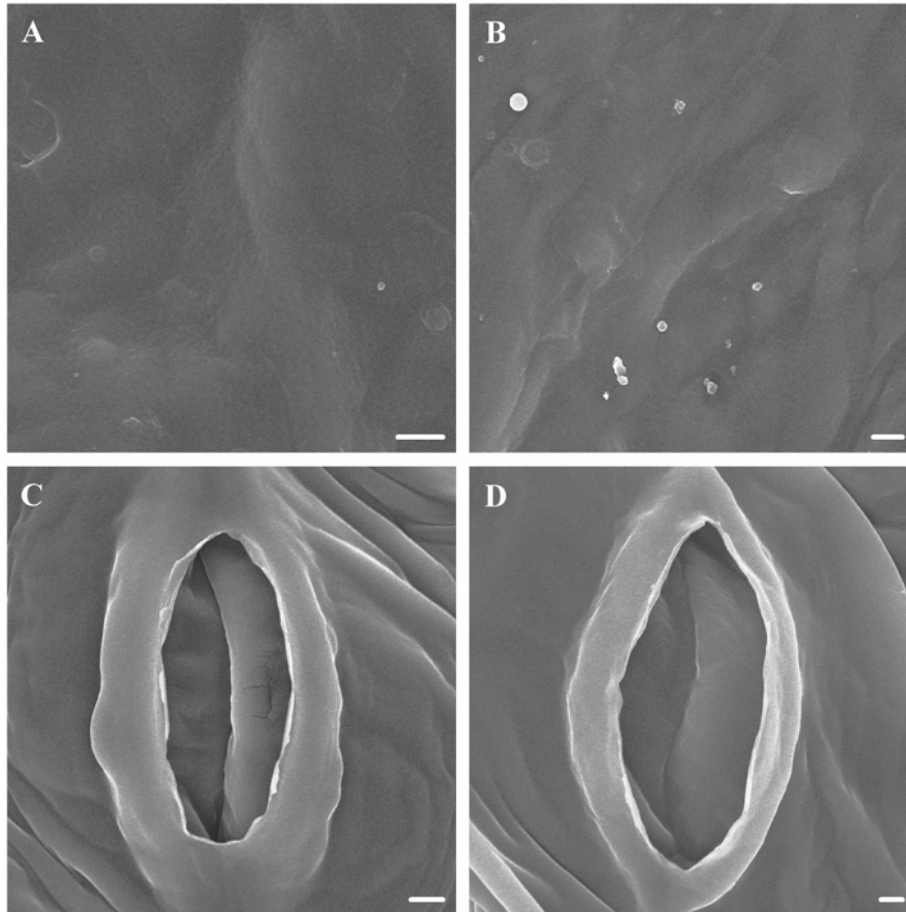


**Supplemental Fig. S1.** Genetic transformation of *TaFAR5* in tomato cv MicroTom driven by the CaMV 35S promoter. (A) schematic representation of constructs used in the transformation experiments. LB, T-DNA left border; 35S polyA, CaMV 35S polyA; Hyg, Hygromycin resistance gene; Tnos, NOS terminator; RB, T-DNA right border. (B) PCR screening of transgenic T<sub>1</sub> generation plants by detecting the presence of hygromycin gene. Lane 1 to Lane 7 represent different transgenic T<sub>1</sub> generation plants; M, DNA ladder DL2000. (C) Plant architecture of T<sub>1</sub> transgenic lines at the flowering stage. CK is the empty pCXSN vector control.



**Supplemental Fig. S2.** Cuticular wax crystal patterns on leaves of tomato detected by SEM. A and B, The adxial side of leaves in CK plants and transgenic T<sub>1</sub> lines, respectively. C and D, The abaxial side of leaves in CK plants and transgenic T<sub>1</sub> lines, respectively. CK is the empty pCXSN vector control. Scale bars = 1  $\mu$ m.



**Supplemental Table S1.** Sequence information of PCR primers for genomic PCR, qRT-PCR, yeast expression and subcellular localization.

Primer name	Sequence (5' to 3')		Description
	Forward primer sequence	Reverse primer sequence	
TaFAR5a	CACCAACTTCTACGAAAGGTA	GTAATTTCAATGTACTTCATAGGAT	Chromosomal localization
TaFAR5b	AAGGACCTCAGGAAGCAGA	GTAATTTCAATGTACTTCATAGGAT	Chromosomal localization
TaFAR5-CDS	ATGGTGGGCACGCTGGATGAGG	TCACTTGTGGACGTACTTCATG	cDNA PCR
TaFAR5-JY1	CGTGTTGCCGTTGCTAAT	ATGTCAAGCCTGGTATGG	Genomic PCR
TaFAR5-JY2	CGTCCGCCGAGTAGCAT	GAGGCAGTACAATCGAAGGAA	Genomic PCR
HPT	GATGTTGGCGACCTCGTATT	TCGTTATGTTTATCGGCACTTT	Transgenic screening
qRT-TaFAR5-1	CCTTGAACCTCCTCCGCCTGCTC	ACTTGCGGGCGAGGTCGTGGTA	Quantitative RT-PCR
qRT-TaFAR5-2	GGATCGAAGGCACCAGGACG	TCTGGCTCTGATGTCTGAGTGGA	Quantitative RT-PCR
qRT-Actin1	TGTTGTTCTCAGTGGAGGTTCT	CTGTATTTCTTTTCAGGTGGTG	Quantitative RT-PCR
qRT-Actin2	CTATCCTTCGTTTGGACCTT	AGCGAGCTTCTCCTTTATGT	Quantitative RT-PCR
TaFAR5-PET28	TCGCGGATCCGAATTCATGG TGGGCACGCTGGATGAGG	GTGCGGCCGCAAGCTTTCACTT GTGGACGTACTTCATG	<i>E.coli</i> yeast
TaFAR5-YS	AGGGAATATTAAGCTTATG GTGGGCACGCTGGATGAGG	GATATCTGCAGAATTCTCACT TGTGGACGTACTTCATG	Yeast expression
TaFAR5-PA7	ACGAACGATACTCGAGATG GTGGGCACGCTGGATGAGG	GCTCACCATCACTAGTGCC TTGTGGACGTACTTCATG	Subcellular localization