Genome-Wide Analyses of Tea Plant Stress-Associated Proteins (SAPs) Reveal the Role of *CsSAP12* in Increased Drought Tolerance in Transgenic Tomatoes

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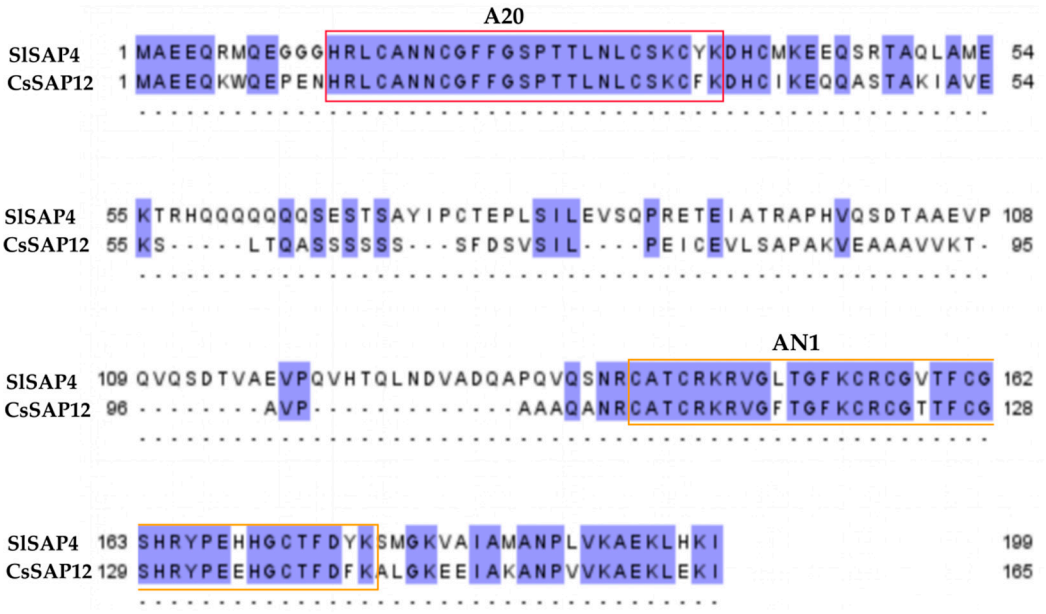
Supplementary Materials List

Supplementary Figure S1. Protein sequence alignment of SlSAP4 (GenBank accession number: XP 019066408) and CsSAP12 by Clustalx.

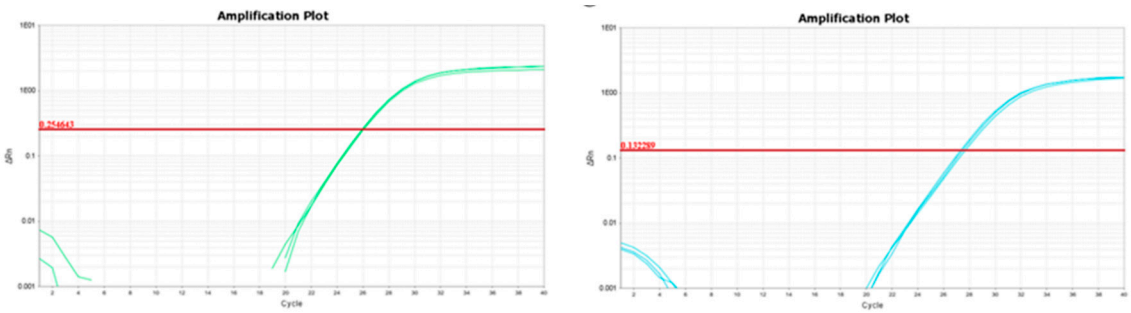
Supplementary Figure S2. The qRT-PCR amplification curve of *CsSAP12* and *SlGRX1*.

Supplementary Figure S3. Phenotypes of *CsSAP12*-overexpressed transgenic lines and wildtype tomatoes.

Supplementary Table S1. Application of primers used for PCR and qRT-PCR.

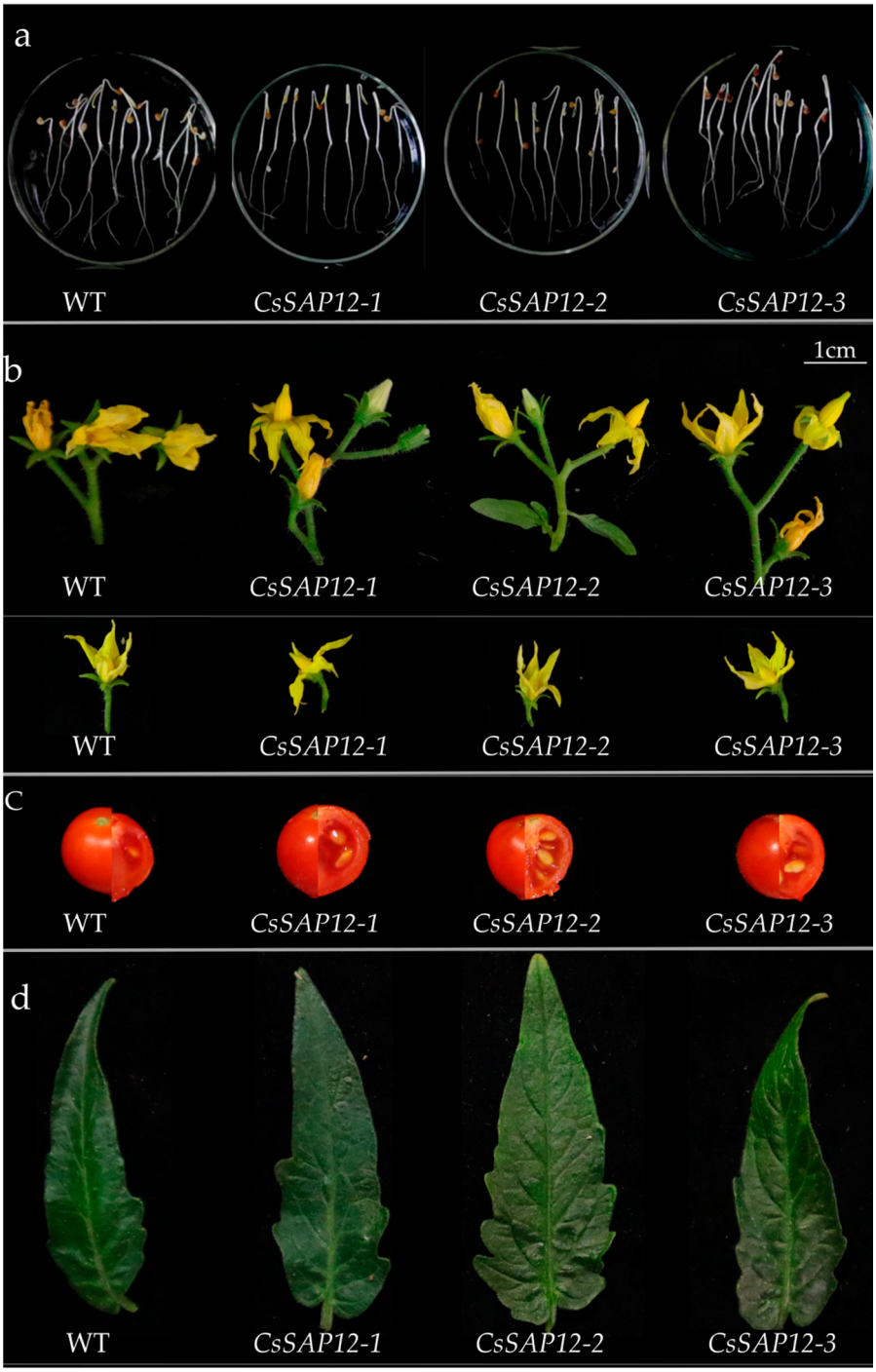


Supplementary Figure S1. Protein sequence alignment of SlSAP4 (GenBank accession number: XP 019066408) and CsSAP12 by Clustalx; A20 and AN1 domains are indicated at the top.



CsSAP12 *CsGRX1*

Supplementary Figure S2. The qRT-PCR amplification curve of *CsSAP12* and *SlGRX1*.



Supplementary Figure S3. Phenotypes of *CsSAP12* over-expressed transgenic and wildtype tomatoes. (a) Seeds germination; (b) Flower development; (c) Fruit development; (d) Leaf development. WT, wildtype; *CsSAP12-1*, 2, 3, *CsSAP12* over-expressed transgenic tomatoes.

Supplementary Table S1. Application of primers used for PCR and qRT-PCR.

Use	Primer Name	Forward Primer (5'–3')	Reverse Primer (5'–3')
PCR	*CsSAP12*	ATGGCAGAGGAACAGAAATGGCAAGAACC	TCATATCTTCTCCAGCTTCTCTGCCTTCT
qRT-PCR	*CsSAP1*	CCAAACTTGCAGCTACCTCC	TTGCACATCTACAGCAACACC
	CsSAP2	TTGTTTCAATGCAAGCGTCT	CATCGGCAATTGAAACCAGT
	CsSAP3	CTGTGATTTCATCTCCGGCTGT	TTTCCTGCACACCGAACACC
	CsSAP4	CCAAACTTGCAGCTACCTCC	AGAAAGAACCTTCGCTTCCAC
	CsSAP5	TTCTTTGGAAGTGCAGCAACC	CTGAATCCACCTGATCCGTT
	CsSAP6	CCAGACACCGGCCTTACCTG	ATCGGGCATCAAGCGAACTCC
	CsSAP7	TTAAGGTTTGCCTCAAGCATC	CCATTAACATTCCTCGAAGCC
	CsSAP8	CACCTCGATCATGACGCCTCC	AGTGTCTGAAATCCCCGATCCTG
	CsSAP9	CGACGATGAACTTGTGCTCCA	CGGATCTCCACACGAAACCC
	CsSAP10	CGAAGGTCCTATTTTGTGCAT	ACTGAATCCACTTGATCCGTT
	CsSAP11	AACTCTCTAGCTCCGACGACT	CTCACCGAACACGATCTCGAA
	CsSAP12	ACAAGCCTCCACTGCTAAGATCG	CCGGCGCAGACAAAACCTCAC
	CsSAP13	GTTTCCGGCATCGTGACTCCT	ATCCATCAGCCACGGAAGC
	CsSAP14	ACTCGACTAAAGCCGTTATGGAC	ATTCAACCGCCGATGACTCC
	SlGRX1	CATGGCGACCTTCAACATCTC	CATCAGACTGCAGAGGCACGG
	CsActin	GGTGCCACAACCTTGATCTT	GCCATCTTTGATTGGAATGG
	SlActin	TGTCCCTATCTACGAGGGTTATGC	AGTTAAATCACGACCAGCAAGAT