

**Mollavali and Börnke; Supplementary Figure S1.**

>pS1TPS2

GGTTGAGAACTGTCGAGATGTTAGCCGGACCAAAAAAGGAAATCAAGTAGACGTTTGTAGTTTCCTTAG  
CGCTCTTACGTTGACGGCCCAGTCCAATCCAACCTCAGTTTTAGCGGGCTGGAAAGACTTTAGAAGGGC  
CTCGAAAAGAGCATCTTACATAATTGTACAATTGATATACAATAATTATATACTATATTTATTATAT  
ATATGTATATACATATAAATATGTATTGTTTATATTTGAATAATACATGATACTTAACCTGGCATCCG  
CAAATTCATTTGAATGTGCACACACCCAAAATTAAAAATTAGAGTTGTCAACTGACATTAAGTTATT  
ATGCCTTTATATTTTCATAAAAGTTGTATATTTTAGATTGTGAATGCATGATGTAACATTCATGTATT  
TATGAAATGTAATATAGTTACTATATATATTAAGTGAGTAGATGAAAATAAGCTTTCATAATAATAGA  
CGAAAAGATTGAAAAGCTAAACCGTAAGATACATAATCTATCAAACCTTTCAGCGTATGAGATTCTT  
GGGAAAATTTGTGCATTTTTTATCCAAATTGAACAATATAATACATTGTTGAGAATATCTTTGAGCTAA  
AAGAACACAATTACTAATATTAAAGTCTAGGTTTAAACAGGAAGAATATGACGATGACAAATCATAGGA  
CTCGACGAAAAAACTAATTGCAAACGTCTATTGCTAAAAGATACTCGAGTGATGTGGTTATGACACAA  
TAAATTTTTTAAAAATCGACTCGTGGATTATGATAATGAGCCACATGAACTTAGTTCAAAGGGGTGA  
TTATTGTGTAGACAAACAGAATGTGACATTGAGTTAAAAGATTGAGAACTATACTAAAATACACGAT  
TTCTAAATGTTGTAAATTTTTTTATTTCAAAAAATATTTACGCTTTATCCAAAACAAACAATATCATA  
CTTTATTAATAACGTGATTGCTCTCCTAACAAAGAGTGAAAAAAAGGTTTACATTACCATTTAACACTT  
TCATAATCACAATTTTATACTACATTATTTTTTTAGAAAATATGATTTTTACTATATTTGAAAATATTTGT  
GATTTTATTTTTAAAGGTTTGTGAGAGTTGAAGAGTTGAGTCCCTATGTGATTAAAAAAGAAGCTTTT  
TGTGTAGTACCGTTGGGGTGCCAACAAGGAGAAAAACAGGTGCGCATCTTGCAATTGCATGGCGAAGA  
AACCCGTGTTTCTCACAACGCTTTCTTCTATCTTTTCACTCTCTTCAAAGGGTTTGGATTTTCTGTA  
ATTTGACGAAACCCCTCTTTGTTCCCTTCTCCATTTTTCTTTTCTGTAATTTTTCACATTTTCTCTC  
CCTCCCTCCTTACATACGTACAAATTTGTTGACAACTTGCTTCTCCTGTCTCTATATGGACTGCCTGCT  
TTACACTTCTAAATCCCAATTTCTCATTGGGTCTTTATTATTATTATTCTTATTGGGATTGACGCTG  
CTGAAG**ATG**

>pS1TPS8

CCTATTATATCCTCAATTAATTATTTTAAAAAGGTAACCTTTTTTTTTTGTCTTATTAAATAGATGTAT  
CAATTCAATAATGGACAAGTAGATTTTCATACTAAAATATGAGTATCTCTTGAGGCGTCGTATTAAAT  
AAATCATGTATCTTCAAATTTCTTTTAATAAATAATTTTATAAAGATTCAATAATAGTAATAACTAAT  
TATTCTTTAATATAAATTTTTTTTATTTTTTTTATTTAAGTTTTGTAAATTTAAAAGTATAAATCTTTCT  
TTTTACAACATATAAATTTATGATGAAGCTTTACATTTTTTATACGGCTGATTATCTACTTTGTTTATT  
AAAGGTTTATCCCAAAATAATAAAATAACAAAAATATAACATTAATCAAATTTAAATTAATGATAA  
TGATGGAGAATTAAAATTCGAGGTGGGCTAGATAGATGAGTAATTTTAGATTAAATCCAGGAATGTGC  
AGTCCGCGCAGCCTTTGAGGCCTTTTAAAAATAGGAATCTGAAAAAATAAAAAATCTGTGTGTCAGCT  
GCATGGCTGTAAGGCTTTATGCACCTTTTAAAGCTTACACGAGGATTCGTCTGCTCTTCCACTTCCCC  
TCTTTAGCTATGATAATAATTCCTCTGCCACCCGGTATTATCGATTTGCTCTCACAATTCATCATCA  
AATGCTACTAATTTTTAATAATTACTCATAATTATTGTTGTGATCAAGCTTTTCCGGCCGGTTATCGA  
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ACAGTCTGGATTTGATTTACCGTGGTTTCTGAAATGGGTAAATTAGCTGTACAGAAATCTCTGTGCC  
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TTGTATTTTGCTTGAACCTGAACTGGGATACCAATGAATTTATATTTAAAAATCCTGGACAGAAAAAG  
CCAAGACTCTTGGGGTGGTAGACCCCATTTCCCTAGAGAATCTGTGGATCCCATTCTCCACACGTTA  
TCTCTTTCTTAGTTTAAATCCTTTTTCTCTCTAGTACTACTGATTTTCAATAATTTAAGTATTGGAT  
TTATATGGGTCTAAATGGAGTGACATGGTTAGTGAAGTGGTGTTATTGTTGTAGTGGTTTATTCAACT  
AGGATGCTGATGTCCATTTCATTTATGTTAGCCTTGGCTGTGAAATTGCATTTTCACTGTTTGTACTT  
GAGGCTATTGTGGAATTGTATAAGTTTTTATATAATTCACGCGGGAGTTTCATCTTTTGTACCTCTT  
ATTATGAAAGATGGTTGTTTCCAGGGACATCATACTCTATTAAATTCATCATAGGTGGTCTTGTCT  
AGACAG**ATG**

**Supplementary Figure S1.** *S1TPS2* and *S1TPS8* promoter sequences 1.5. kb upstream of the translational start site (bold).

Mollavali and Börnke; Supplementary Table S1.

**Table S1. *TPS/TPP*-genes in tomato (*Solanum lycopersicum*)**

Family	Gene	Locus ID	GenBank No.	Acc.	ORF (bp)	Protein MW KDa	PCR
TPS	<i>SITPS1</i>	Solyc01g005210	XP_004228746		2574	97	+
	<i>SITPS2</i>	Solyc02g071590	XP_010316884		2832	106	+
	<i>SITPS3</i>	Solyc02g072150	XP_004233035		2556	96	+
	<i>SITPS4</i>	Solyc04g025940	XP_004237260		2574	96	+
	<i>SITPS5</i>	Solyc05g005750	XP_004238680		2556	96	+
	<i>SITPS6</i>	Solyc07g006500	XP_010323144		2631	96	+
	<i>SITPS7</i>	Solyc07g055300	XP_004243268		2577	97	+
	<i>SITPS8</i>	Solyc07g062140	NP_001234879		2781	104	+
	<i>SITPS9</i>	Solyc08g076650	XP_004245918		2589	97	+
	<i>SITPS10</i>	Solyc10g007950	XP_004248198		2574	97	+
	<i>SITPS11*</i>	Solyc10g046770	XM_010329326		735	28	-
TPP	<i>SITPP1</i>	Solyc03g007290	XP_004234173		1011	39	+
	<i>SITPP2</i>	Solyc03g083960	XP_025885725.1		1154	43	+
	<i>SITPP3</i>	Solyc04g054930	XP_004237406		1167	44	+
	<i>SITPP4</i>	Solyc04g072920	XP_004237894		1098	41	+
	<i>SITPP5</i>	Solyc04g082550	XP_025886308		882	33	-
	<i>SITPP6</i>	Solyc05g051880	XP_019069377.1		905	34	-
	<i>SITPP7</i>	Solyc06g060600	XP_004242008		1020	38	-
	<i>SITPP8</i>	Solyc08g079060	XP_004245739		1161	43	+

Mollavali and Börnke; Supplementary Table 2.

Supplementary Table 2. Nucleotide sequences of gene-specific primers.		
Target gene		Primer sequences used for qRT-PCR primers
<i>SITPS1</i>	Fw	5'-GCTCCAGCAGCCGAAGTCTT-3'
	Rv	5'-CCTGCATCAGCCTAACTATCTC-3'
<i>SITPS2</i>	Fw	5'-TCTTTTCCATTATCTCCCACTTCCG -3'
	Rv	5'- GCTGTCTTGGTCCTCTACTCCTTC-3'
<i>SITPS3</i>	Fw	5'- CTTCCAGTGAGAGAGGAGAT-3'
	Rv	5'- CATGCGACTACAACAGGATAG-3'
<i>SITPS4</i>	Fw	5'- AGAAGCCAAGCAAAGCCAAG-3'
	Rv	5'- AGAAGCATTAGCAAGACCTCCA-3'
<i>SITPS5</i>	Fw	5'- AAAGCCAAGCAAAGCCAAGTA-3
	Rv	5'- GACAGGACGCATTACCAAGAC-3'
<i>SITPS6</i>	Fw	5'- TTCAGCAGCTTCTACAGCAATG-3'
	Rv	5'- CTAGGGAGAGATCTTCGACAGA-3'
<i>SITPS7</i>	Fw	5'- ACACATCTGAGGTGGTGCTTAT-3'
	Rv	5'- GGAGTCCGCAGGTTTCATCGT-3
<i>SITPS8</i>	Fw	5'- GTGTCATGGAATGTGCTGGAT-3'
	Rv	5'- TGGCGTACTGAGCAGATACC-3
<i>SITPS9</i>	Fw	5'- GGCCAGAAACCAAGCAAGG-3'
	Rv	5'- CTCAGAAGCAGAAGCCAGG-3'
<i>SITPS10</i>	Fw	5'- TCGGTGATGCTTTATCCAGAAA-3'
	Rv	5'- AACCTCTGAAGTGTCTGTCCTCAA-3'
<i>SITPS11</i>	Fw	5'- TGTGGTTTACAACAATAGGGTGG-3'
	Rv	5'- TGTCTAGAATCGATTATGTCCGG-3'
<i>SITPP1</i>	Fw	5'- TGAACGTGCCTTCATGTC-3'
	Rv	5'- CTGTCGACTTCTTCCACTTATT-3'
<i>SITPP2</i>	Fw	5'- AGGAGATGATCGTACAGATGAA-3'
	Rv	5'- GATCCCTCAGAGAGTAGAATGC-3'
<i>SITPP3</i>	Fw	5'- CTGAGGTTATGGTGTCTTCTACG-3'
	Rv	5'- GTTCCTTAGAGATGCTTTCATC-3'
<i>SITPP4</i>	Fw	5'- AGGCTTTGGAATATTAGTGTCC-3'
	Rv	5'- CCACTCCACCAAACGATTCAAA-3'
<i>SITPP5</i>	Fw	5'- GAGAATGGTGCTAGGTGAAG-3'
	Rv	5'- CGATTTCTACAGCTATTATCAGTGGACGA-3'
<i>SITPP6</i>	Fw	5'- GACTATGATGGTACCCTTTCTC-3'
	Rv	5'- TGCACCTCCCACTAACTAT-3'
<i>SITPP7</i>	Fw	5'- CGTGATAGACTGGGACAAAG-3'
	Rv	5'- CTGTTCTGTCATCGCCAATA-3'
<i>SITPP8</i>	Fw	5'- GTGGGAGAAGACGTGATAAG-3'
	Rv	5'- GCAGACGATGTATTCTTGATTG-3'
<i>SITRE1</i>	Fw	5'- ACGGGTTTCGGATGGTCAAA-3'
	Rv	5'- GCAGTCATTCTTCAAATCTTCG-3'
<i>Ubiquitin</i>	Fw	5'- TCGTAAGGAGTCCCCTAATGCTGA-3'
	Rv	5'- CAATCGCCTCCAGCCTTGTGTAA-3'
		Primer sequences used for cloning
<i>SITPS1</i>	Fw	5'-GTCGACACAAATGGTGTCAAGATCCTATTC-3'
	Rv	5'-TCTAGACATCTGTGGTAACATTTGGTC-3'
<i>SITPS2</i>	Fw	5'-GGATCCACAAATGGAGTCGATTGAAGATAC-3'
	Rv	5'-AAGCTTGCAAGATGAATTATTGGCC-3'

<i>SITPS3</i>	Fw	5'-GTCGACACAAATGATGTCCAAATCTTATAC-3'
	Rv	5'-TCTAGATGTTACAATTTCTGATGGAGG-3'
<i>SITPS4</i>	Fw	5'-GGATCCACAAATGGCATCAAGATCTAG-3'
	Rv	5'-CTCGAGAATAACAGAACCAAAGGC-3'
<i>SITPS5</i>	Fw	5'-GGATCCACAAATGCCATCAAGATCTTG-3'
	Rv	5'-CTCGAGCAGAACAGAGTCCAATGC-3'
<i>SITPS6</i>	Fw	5'-GGATCCACAAATGTTGATGAATGTTCCAGG-3'
	Rv	5'-GTCGACTACAAAGGATGCATGATTC-3'
<i>SITPS7</i>	Fw	5'-GGATCCACAAATGATGTCTAGATCGTATAC-3'
	Rv	5'-CTCGAGGTCCGAGTCCGCAGGTTTC-3'
<i>SITPS8</i>	Fw	5'-GGATCCACAAATGCCAGGGAACAAGTATAC-3'
	Rv	5'-GTCGACTGATGTCCCATTTGAAATAG-3'
<i>SITPS9</i>	Fw	5'-GTCGACACAAATGGTTTTCAAGGTCATATTC-3'
	Rv	5'-CTCGAGTTCTCGGTCAATGATTACGC-3'
<i>SITPS10</i>	Fw	5'-GGATCCACAAATGATTTTCGAGATCGTATAC-3'
	Rv	5'-CTCGAGAGCCGAGTCCTCAGCTTC-3'
<i>SITPP1</i>	Fw	5'-GGATCCACAAATGAGAGAAAATTTGACAAG-3'
	Rv	5'-GAATTCACCCGCGGAAACCTCCCC-3'
<i>SITPP2</i>	Fw	5'-AAGCTTACAAATGGACCTGAAATCAAATAC-3'
	Rv	5'-GTCGACTACCTCCGATGGATCCCTC-3'
<i>SITPP3</i>	Fw	5'-GATATCACAAATGACTCAGCAGAATG-3'
	Rv	5'-CTCGAGGTTCTTAGAGATGCTTTC-3'
<i>SITPP4</i>	Fw	5'-GGATCCACAAATGACTAATCAGAATG-3'
	Rv	5'-AAGCTTTTTCTTCTGATATTTTG-3'
<i>SITPP8</i>	Fw	5'-GGATCCACAAATGGACTTGAATTCG-3'
	Rv	5'-GATATCTATATCATCATCTTCAAC-3'
		<b>Primer sequences used for construction of <i>GUS::ProSITPS2,8</i></b>
<i>ProSITPS2::GUS</i>	Fw	5'-GGTTGAGAACTGTCGAGATGTTAGC-3'
	Rv	5'-CTTCAGCAGCGTCAATCCC-3'
<i>ProSITPS8::GUS</i>	Fw	5'-GATGTATCAATTCAATAATGGAC-3'
	Rv	3'-CTAGAACAAGACCACCTATGATG-3'