

Running title: *SIFSR* plays a role in tomato fruit shelf-life

Title:

The *SIFSR* gene controls fruit shelf-life in tomato

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19 **Table S1** Specific primer sequences used for gene amplification and qRT-PCR analysis.

Primer code	Primer sequences (5' →3')	Application
<i>CAC-Q-F</i>	CCTCCGTTGTGATGTAAGTGG	Internal standard gene for Quantitative
<i>CAC-Q-R</i>	ATTGGTGGAAAGTAACATCATCG	RT-PCR in tomato development
<i>EF1α-Q-F</i>	TACTGGTGGTTTTGAAGCTG	Internal standard gene for Quantitative
<i>EF1α-Q-R</i>	AACTTCCTTCACGATTTCATCATA	RT-PCR under ACC treatment
<i>SIFSR-Q-F</i>	GAACTCTACAACCATTCCCCTCC	Quantitative RT-PCR analysis for
<i>SIFSR-Q-R</i>	TAATAGTTTCTCCAACATGCTCCA	<i>SIFSR</i>
<i>SIFSR-RNAi-F</i>	CGGGGTACCATCGATATTGGGAGCCTTGATGGA	To establish <i>SIFSR</i> RNAi lines; added <i>Kpn</i> I and <i>Cla</i> I site underlined
<i>SIFSR-RNAi-R</i>	CCGCTCGAGTCTAGACGCGAGACGAAAGTGCA	To establish <i>SIFSR</i> RNAi lines; added <i>Xho</i> I and <i>Xba</i> I site underlined
<i>SIFSR-over-F</i>	GCTCTAGACTCTTCACCCGCAGACCTAA	To establish <i>SIFSR</i> overexpression

<i>SIFSR-over-R</i>	CGAGCTCCAATGGACCACTTTGAGAATGA	lines; added <i>Xba</i> I site underlined
		To establish <i>SIFSR</i> overexpression
		lines; added <i>Sac</i> I site underlined
<i>NPT II-F</i>	GACAATCGGCTGCTCTGA	Positive transgenic plants detection
<i>NPT II-R</i>	AACTCCAGCATGAGATCC	
<i>PSYI-Q-F</i>	AGAGGTGGTGAAAGCAA	Quantitative RT-PCR analysis for
<i>PSYI-Q-R</i>	TCTCGGGAGTCATTAGCAT	ethylene- and ripening-related genes
<i>ACO1-Q-F</i>	ACAAACAGACGGGACACGAA	
<i>ACO1-Q-R</i>	CTCTTTGGCTTGAAACTTGA	
<i>E8-Q-F</i>	GGCACCATTCAACATACCG	
<i>E8-Q-R</i>	CTTTCACCGAAGAAGCACG	
<i>RIN-Q-F</i>	GGAACCCAAACTTCATCAGA	
<i>RIN-Q-R</i>	TTGTCCCAAATCCTCACCTA	
<i>LOXB-Q-F</i>	TGCTACAATGACTTGGGTGAA	
<i>LOXB-Q-R</i>	CCTGTCCTGCCTCTACG	
<i>PG-Q-F</i>	ATACAACAGTTTTTCAGCAGTTCAAGT	Quantitative RT-PCR analysis for
<i>PG-Q-R</i>	GGTTTTCCACTTTCCCTACTAA	cell wall metabolism-related genes
<i>PEI-Q-F</i>	GCTTGCGTCTTTGACAACTCAGG	
<i>PEI-Q-R</i>	GTGCCACCACTGCATTCGCTAT	
<i>XYL1-Q-F</i>	TGATCGGCAATTATGAAGGTATTC	
<i>XYL1-Q-R</i>	CAGCACATCCTGGCTTGTAAT	
<i>XTH5-Q-F</i>	CCACCACCAGAGTGCGAGAT	
<i>XTH5-Q-R</i>	TTTTCTTAGGATGACGATGTCCG	
<i>CEL2-Q-F</i>	ACACATTGCCAAACGTCAGGT	
<i>CEL2-Q-R</i>	CCCCTATGGTGAATCCTTTGTG	
<i>EXP1-Q-F</i>	CCCTCCTCGCCCTCACTTT	
<i>EXP1-Q-R</i>	TCTGATTCCCTCCTTGCTTTCG	
<i>PL-Q-F</i>	GCGATCAGGAGTTAGAACTGG	
<i>PL-Q-R</i>	AATCCCCTTTTGCTTTGGTT	
<i>TBG4-Q-F</i>	AAATGGTGAAGGCGTAGGTTCG	
<i>TBG4-Q-R</i>	AGGTTGTCCGCAGTTAGTCTGG	
<i>MAN1-Q-F</i>	ACACCGTCCTCCTGAGATTGG	
<i>MAN1-Q-R</i>	GAGCCTCTGCTTTCCACTTTAATC	
