

Supplemental Table 1. Microarray analysis of the expression of *LARP1c* in leaves at different developmental stages.

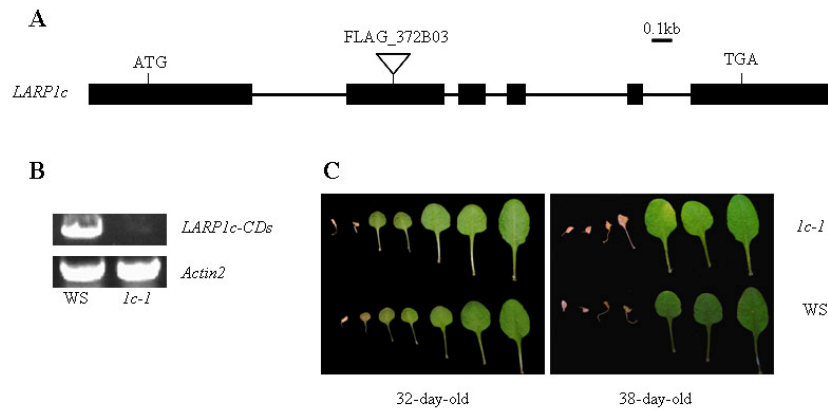
	rosette leaf #2	rosette leaf #4	rosette leaf #6	rosette leaf #8	rosette leaf #10	rosette leaf #12	senescing leaves
<i>LARP1a (at5g21160)</i>	0.7743	0.7497	0.7994	0.8393	1.0495	1.1857	0.7326
<i>LARP1b (at5g66100)</i>	0.5908	0.6572	0.6824	0.6501	0.7345	0.6362	0.7246
<i>LARP1c (at4g35890)</i>	0.6182	0.6211	0.615	0.5875	0.5433	0.5568	<u>1.1785</u>

Rosette leaves were detached from 17-day-old plants, while senescing leaves were detached from 35-day-old plants. The data are mean-normalized values. *LARP1c* had increased expression in senescing leaves compared with rosette leaves. All data were extracted from AtGenExpress (<http://jsp.weigelworld.org/expviz/expviz.jsp>).

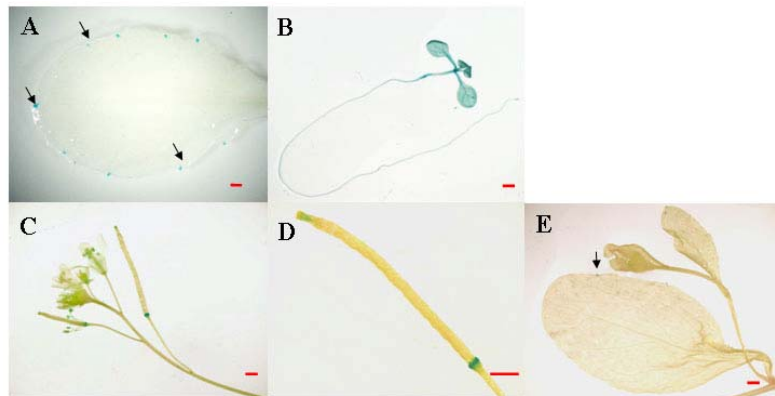
Supplemental Table 2. Oligonucleotides used in this study

Name	Sequence (from 5' to 3')	Purpose	enzyme
Plasmid (letters in bold represent restriction enzyme cutting sites)			
1a-oe-F	AACTGCAGATGATGGCGGAGACTGAAGGATCAGTG	1a-OE	<i>PstI</i>
1a-oe-R	GGGGTACCTCAGTGAGACTGTTTTCTTTTTGGTTGGTG		<i>KpnI</i>
1b-oe-F	CTGCAGATGATGGCTACGACGGCGAG	1b-OE	<i>PstI</i>
1b-oe-R	GGTACCTTACACTCCCTCTCTGCTCCTCTC		<i>KpnI</i>
1c-oe-F	CTGCAGATGGCTTCCGCCACTTCCAATAACCCTG	1c-OE	<i>PstI</i>
1c-oe-R	GGTACCTCAACGGTTTGACCATCTGGGGCGTTG		<i>KpnI</i>
1c-dex-F	CTCGAGATGGCTTCCGCCACTTCCAATAACCCTG	1c-dex	<i>XhoI</i>
1c-dex-R	ACTAGTTCAACGGTTTGACCATCTGGGGCGTTG		<i>SpeI</i>
1c-oe-F	CTGCAGATGGCTTCCGCCACTTCCAATAACCCTG	1c-GFP	<i>PstI</i>
1c-gfp-R	GGTACCACGGTTTGACCATCTGGGGCGTTG		<i>KpnI</i>
1c-pro-F	AAGCTTACACTTTACACGACCGAGAC	1c-GUS	<i>HindIII</i>
1c-pro-R	GGATCCGAGAGAGGACCAAAAAATTAGG		<i>BamHI</i>
RT-PCR & qRT-PCR			
RT-1c-F	TGGTCAGGACAATGCTGGAAG		
RT-1c-R	TGCCGAATAGGTGTCATGTAAGG		
RT-SAG12-F	CAGCTGCGGATGTTGTTG		
RT-SAG12-R	CCACTTTCTCCCCATTTG		
RT-SAG13-F	GCAACCAAAGGAGCCATG		
RT-SAG13-R	GTTTGGCCAACTAGTCTGC		
RT-SEN4-F	CTTACTCAATCCTCTGGAAC		
RT-SEN4-R	CTATGAGCTTGTGTGCATT		
RT-WRKY6-F	CTAATGGTTCCAATCCTTCC		
RT-WRKY6-R	GTTGTTTCCTTCGCCGTC		
RT-Actin2-F	CACTGTGCCAATCTACGAGGGT		
RT-Actin2-R	GCTGGAATGTGCTGAGGGAAG		
RT-PR1-F	CGTCTTTGTAGCTCTGTAGGTGCTCTTGTTT		
RT-PR1-R	GTATGGCTTCTCGTTCACATAATCCCACGAG		
RT-PR2-F	CTTGTGGGCTTTTTATGTAAGCG		
RT-PR2-R	TTGGGCCTATAGGCCATGC		
RT-EDS1-F	ACCGAGCGCTATCACAAGGAAG		
RT-EDS1-R	ACAGCATTTGAAGAATGGCGTC		
RT-PAD4-F	GCGATGCATCAGAAGAG		
RT-PAD4-R	TTAGCCCAAAGCAAGTATC		
RT-PDF1.2-F	ATGGCTAAGTTTGCTTCCATCATCACCCTTATC		
RT-PDF1.2-R	CATGGGACGTAAACAGATACACTGTGTGCTGGG		
RT-AAO3-F	TACTAGGTATGATCCAAGGAG		
RT-AAO3-R	ACACTATAAATCCGCAAAGAGA		
RT-NCED3-F	CAACGGAGCTAACCCACTTCA		

RT-NCED3-R	ACCCATCACGACGACTTCATCT	
qRT-RBCS1A-F	ATTGCCTACAAGCCACCAAG	
qRT-RBCS1A-R	ATTTGTAGCCGCATTGTCCT	
qRT-LARP1c-F	AATGGGGCTTCTGAGGTTGG	
qRT-LARP1c-R	ATTTGGAGTTGGATTAGGGTTTG	
qRT-AT4G34270-F	GTGAAAACGTGTTGGAGAGAAGCAA	
qRT-AT4G34270-R	TCAACTGGATACCCTTTCGCA	
T-DNA line isolation		
LB4	CGTGTGCCAGGTGCCACGGAATAGT	
1c-F	AATGGTAGAAGAAGTGCAGAC	
1c-R	AGGACAATGCTGGAAAGAAAC	



Supplemental Fig. 1. Gene structures of *LAR1c* and phenotype of T-DNA insertion line. (A) Gene structures of *LAR1c* and location of T-DNA insertion. Black boxes represent exons and lines represent introns. ATG, start codon. TGA, stop codon. FLAG_372B03, T-DNA insertion line *lc-1*. (B) *LAR1c* expression in WS and knockout mutant *lc-1*. (C) Leaf phenotype in WS and *lc-1*. Cotyledons and rosette leaves were excised from 32- and 38-day-old plants and placed in order.



Supplemental Fig. 2. GUS activity in leaf margins and other tissues. GUS activity was detected in leaf margins (arrows) of 8th rosette leaves of 5-week-old plants (A), in roots and cotyledons of 10-day-old seedlings (B), and in inflorescences (C) and siliques (D) from 6-week-old plants, but not in cauline leaves (E), except some blue spots at the leaf margins (arrow). Bar=1.0 mm.