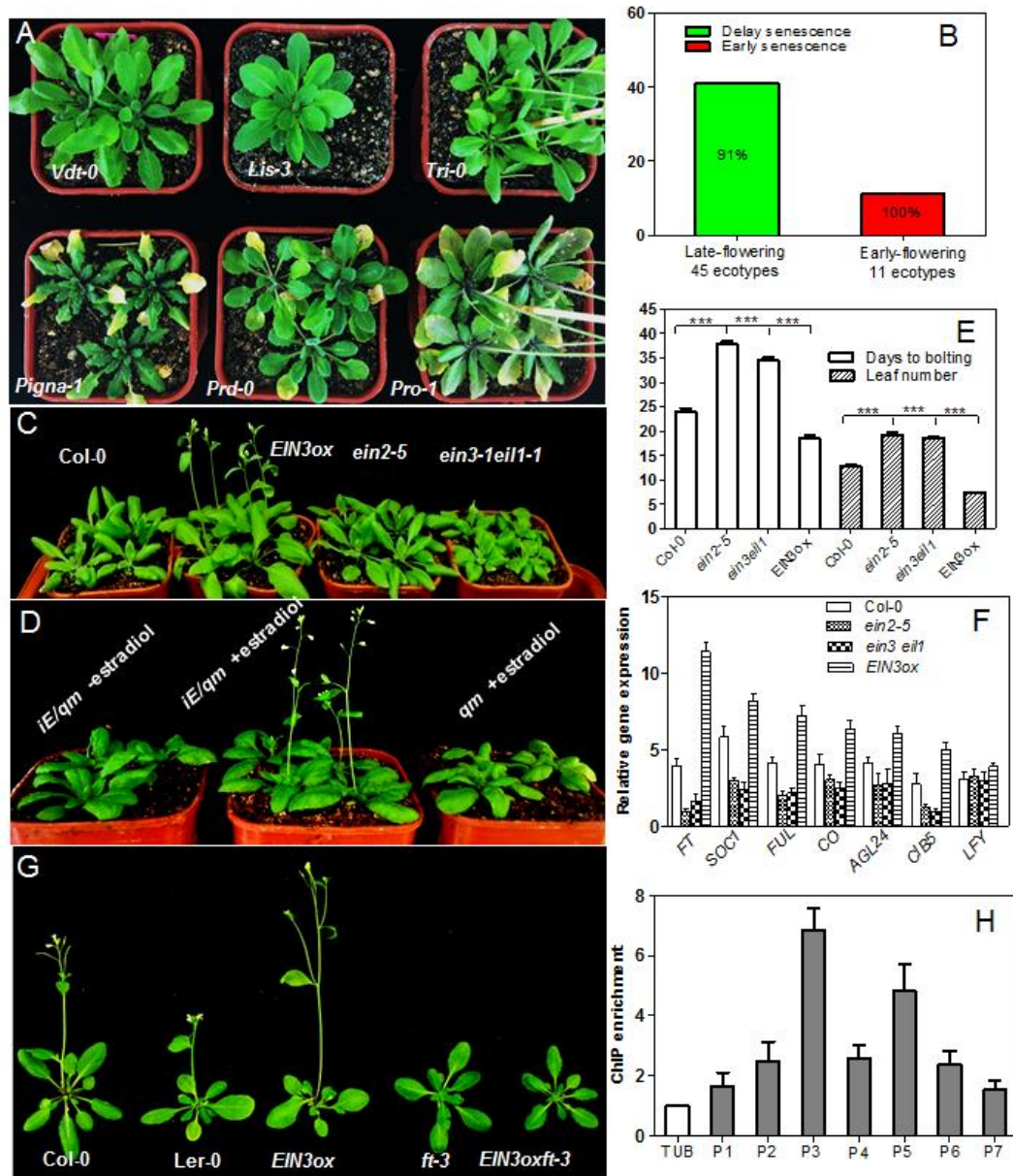


Supplementary data



Supplementary Figure 1. Study on the relationship between senescence and flowering by using ecotypes and experimental analysis of the underlying mechanism via using genetic and biochemical data in *Arabidopsis*. (A-B) the senescence and flowering phenotypes of six ecotypes on long-day conditions (16 h light/8 h dark). (C-H) EIN3, a positive regulator of leaf senescence, induces early flowering by directly binding *FLOWERING LOCUS T* (*FT*) and increasing its expression (***, $P < 0.001$).

Supplementary Table S1. List of 617 mutants in LSD3.0.

Mutant	Background	Mutagenesis type	Dominance
<i>Asnodf32-silenced line</i>	<i>Astragalus sinicus L.</i>	RNAi	recessive
<i>MpSNAC67ox</i>	Banana (<i>Musa x paradisiaca</i>)	Transgene	dominant
<i>HvRBOHF2 KD plants</i>	Barley (<i>Hordeum vulgare</i>)	T-DNA	recessive
<i>35S:BnLAS</i>	<i>Brassica napus</i>	Transgene	dominant
<i>35S-BrANT-1</i>	<i>Brassica rapa var. parachinensis</i>	Transgene	dominant
<i>rpn10-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>sweetie</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>p35S::CmBBX22</i>	Chrysanthemum	Transgene	dominant
<i>abf2abf3abf4</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>abig1-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>chmp7-2, SALK_0071371C</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>psan-2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>pyl9</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>pyr1pyl1/2/3/4/5/7/8/9/10/11/12</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>rrt1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>SINAP1-KD</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>SINAP1-OE</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>SRT1.RNAi</i>	<i>Arabidopsis thaliana</i>	RNAi	recessive
<i>vps35b-2(SALK_038926)</i>	<i>Arabidopsis thaliana</i>	T-DNA	dominant
<i>2/per OxyR-RD-cpYFP overexpressing line</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>2x35S-UBA2a-OX</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>35S-JUB1</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>35S-NOL-GFP</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>35S-NYC1-GFP</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>35S-PAO-GFP</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>35S-PAS2:GFP overexpression line</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>35S-PPH-GFP</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>35S-RCCR-GFP</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>35S-SGR-GFP</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>35S::9 deltaC Transgene plant</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>35S::CaM1-GFP</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>35S::DEAR1</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>35S:ANAC092</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>35S:ATAF1/anac092-1</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>35S:ATAF1/Col-0</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>35S:AtB11</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>35S:AtLrgB</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>35S:BB</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>35S:CAT2</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>35S:COR15A</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>35S:COR15B</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant

35S:CRS	<i>Arabidopsis thaliana</i>	Transgene	dominant
35S:FT soc1-3 ful-2	<i>Arabidopsis thaliana</i>	cross	recessive
35S:FYF	<i>Arabidopsis thaliana</i>	Transgene	dominant
35S:GLK1	<i>Arabidopsis thaliana</i>	Transgene	dominant
35S:GLK2	<i>Arabidopsis thaliana</i>	Transgene	dominant
35S:GRF5	<i>Arabidopsis thaliana</i>	Transgene	dominant
35S:MAPKKK18	<i>Arabidopsis thaliana</i>	Transgene	dominant
35S:MAPKKK18KN	<i>Arabidopsis thaliana</i>	Transgene	dominant
35S:MKK9	<i>Arabidopsis thaliana</i>	Transgene	dominant
35S:MKK9mpk6	<i>Arabidopsis thaliana</i>	cross	dominant
35S:NTL4deltaC plants	<i>Arabidopsis thaliana</i>	Transgene	dominant
35S:ORE1	<i>Arabidopsis thaliana</i>	Transgene	dominant
35S:ORE1/35S:GLK2	<i>Arabidopsis thaliana</i>	Transgene	dominant
35S:ORS1	<i>Arabidopsis thaliana</i>	Transgene	dominant
35S:PVA31	<i>Arabidopsis thaliana</i>	Transgene	dominant
35S:RD29A	<i>Arabidopsis thaliana</i>	Transgene	dominant
35S:RD29B	<i>Arabidopsis thaliana</i>	Transgene	dominant
35S:RPN5a	<i>Arabidopsis thaliana</i>	Transgene	dominant
35S:RPN5b	<i>Arabidopsis thaliana</i>	Transgene	dominant
35S:SAG29	<i>Arabidopsis thaliana</i>	Transgene	dominant
35S:SSPP	<i>Arabidopsis thaliana</i>	Transgene	dominant
35S:VNI2	<i>Arabidopsis thaliana</i>	Transgene	dominant
35S:YUC6	<i>Arabidopsis thaliana</i>	Transgene	dominant
8/cyt OxyR-RD-cpYFP	<i>Arabidopsis thaliana</i>	Transgene	dominant
aaf-KO	<i>Arabidopsis thaliana</i>	T-DNA	recessive
AAF-OX	<i>Arabidopsis thaliana</i>	Transgene	dominant
AAF-OXein2-5	<i>Arabidopsis thaliana</i>	cross	NA
aba2-1	<i>Arabidopsis thaliana</i>	EMS	recessive
abc1k7 (SALK_020431)	<i>Arabidopsis thaliana</i>	T-DNA	recessive
abc1k7 abc1k78	<i>Arabidopsis thaliana</i>	T-DNA	recessive
abc1k78 (GABI_132G06)	<i>Arabidopsis thaliana</i>	T-DNA	recessive
acbp3	<i>Arabidopsis thaliana</i>	T-DNA	recessive
ACBP3-GFP	<i>Arabidopsis thaliana</i>	Transgene	dominant
ACBP3-RNAi	<i>Arabidopsis thaliana</i>	RNAi	recessive
ACBP3deltaSS-GFP	<i>Arabidopsis thaliana</i>	Transgene	recessive
ACBP3OE	<i>Arabidopsis thaliana</i>	Transgene	dominant
acd1/pao	<i>Arabidopsis thaliana</i>	EMS	recessive
acd2	<i>Arabidopsis thaliana</i>	EMS	recessive
acs2-1acs4-1acs5-2acs6-1acs7-1acs9-1amiRacs8acs11	<i>Arabidopsis thaliana</i>	cross	recessive
ACS6DDD	<i>Arabidopsis thaliana</i>	Transgene	dominant
agb1-2	<i>Arabidopsis thaliana</i>	T-DNA	recessive
ahk2-2	<i>Arabidopsis thaliana</i>	T-DNA	recessive
ahk2-5	<i>Arabidopsis thaliana</i>	T-DNA	recessive

<i>ahk2-5ahk3-7</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ahk2ahk3cre1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ahk2cre1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ahk3-3</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ahk3-7</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ahk3cre1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>alh1</i>	<i>Arabidopsis thaliana</i>	EMS	recessive
<i>amiRgox1/2</i>	<i>Arabidopsis thaliana</i>	Transgene	recessive
<i>amiRNA-CaM1</i>	<i>Arabidopsis thaliana</i>	RNAi	recessive
<i>anac002/ataf1-1 (SALK_067648)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>anac017</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>anac017anac082</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>anac017anac090</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>ANAC017ox</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>anac019 (SALK_096295)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>anac046</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ANAC046ox</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>ANAC046SRDX</i>	<i>Arabidopsis thaliana</i>	Transgene	recessive
<i>anac055 (SALK_014331)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>anac072/rd26 (SALK_063576)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>anac081/ataf2 (SALK_015750)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>anac082</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>anac082anac090</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>ANAC082ox</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>anac090</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>ANAC090ox</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>anac092-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ANAC092-IOE</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>ANAC092-RNAi</i>	<i>Arabidopsis thaliana</i>	RNAi	recessive
<i>anac102 (SALK_030702)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ap2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>apt1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>arf1-5 arf2-8</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>arf2-5</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>arf2-8</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>arf2-8 nph4-1 arf19-4</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>ARR2K90G-HA ox</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>arr3 arr4 arr5 arr6 arr8 arr9</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>arr3arr4arr5arr6</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>asat1-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>asat1-1psat1-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>asat1-1psat1-2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>asn2-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>asn2-2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive

<i>at2-mmp-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>Ataah</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ataf1-4</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>Ataln</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>atapg9-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>AtATG18a RNAi plant</i>	<i>Arabidopsis thaliana</i>	RNAi	recessive
<i>atatg5</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>AtBAG5 (SALKseq_037369)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>AtBAG5 (SALKseq_205784C)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>atbi1-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>atbi1-2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>AtCHX24OX</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>AtCYO1ox</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>AtFAAHOE</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>atfer1-2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>atfish6</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>atg10-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>atg11-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>atg2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>atg2pen2</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>atg4a4b-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>atg5coi1</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>atg5ein2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>atg5jar1</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>atg5npr1</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>atg5pen1</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>atg5pen2</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>atg5sid2</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>atgrp7-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>AtIAA17ox</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>ATL31KO</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>ATL31ox</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>AtMKP2i</i>	<i>Arabidopsis thaliana</i>	RNAi	recessive
<i>atmybl RNAi</i>	<i>Arabidopsis thaliana</i>	RNAi	recessive
<i>AtMYBLox</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>AtMYBR1ox</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>atmyr1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>atmap</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>atmos1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>AtOM66OX</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>atpap26(Salk_152821)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>AtTORi</i>	<i>Arabidopsis thaliana</i>	RNAi	recessive
<i>AtTOR_RNAi</i>	<i>Arabidopsis thaliana</i>	RNAi	recessive
<i>Atxdh1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive

<i>aux1-7/GVG:GmSARK</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>azf2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>bag5-1 (SALK_037369)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>bag5-1 (SALK_205784C)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>bap1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>bap1bap2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>bap2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>bb/eod1-2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>bcd1-1D</i>	<i>Arabidopsis thaliana</i>	Activation tag	dominant
<i>BCG</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>bcl1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>bhlh03 bhlh13 bhlh14 bhlh17</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>bot1</i>	<i>Arabidopsis thaliana</i>	EMS	recessive
<i>bri</i>	<i>Arabidopsis thaliana</i>	EMS	recessive
<i>ccx1-1 (SALK_035514)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ccx4 (SALK_040272)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>chmp7-1, SALK_094259C</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>CHMP7ox</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>cipk14</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>clh1-1 (SALK_124978)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>clh2-2 (SAIL_646_E09)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>cos1</i>	<i>Arabidopsis thaliana</i>	EMS	recessive
<i>cre1/ahk4</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>crf1,3,5,6</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>CRF1ox</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>crf2-3</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>crf1,3,5,6</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>CRF3ox</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>crf5-5</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>CRF5ox</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>crf6</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>crf6-3</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>CRF6ox</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>crs</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ctr1-1</i>	<i>Arabidopsis thaliana</i>	EMS	recessive
<i>cvp1-3</i>	<i>Arabidopsis thaliana</i>	EMS	recessive
<i>cyp51A2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>d2hgdh1-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>d2hgdh1-3</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>da1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>da1-1_bb/eod1-2</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>ddm1-2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>det2</i>	<i>Arabidopsis thaliana</i>	EMS	recessive
<i>DEX-UBA2a-OX</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant

<i>DEX-UBA2b-OX</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>DEX-UBA2c-OX</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>DEXin:MKK9</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>dls1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>dmr1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>dnd1</i>	<i>Arabidopsis thaliana</i>	EMS	recessive
<i>drd1-6</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>dreb2a</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>drl1-D</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>dur3-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>e1a1-1 (SALK_071680C)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>e1a2-1 (CS68926)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>edr1</i>	<i>Arabidopsis thaliana</i>	EMS	recessive
<i>ein2-1/GVG:GmSARK</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>ein2-34</i>	<i>Arabidopsis thaliana</i>	EMS	recessive
<i>ein2-5EIL1ox</i>	<i>Arabidopsis thaliana</i>	cross	NA
<i>ein3</i>	<i>Arabidopsis thaliana</i>	EMS	recessive
<i>elf3-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ELF3ox</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>elf4-209;elf3-1 elf4-209</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>els1-1 (SAIL_1236_H10)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>els1-D</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>erd1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ESROE</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>ESROEWRKY53KO</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ESROEWRKY53OE</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>etfqo-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>etfqo-2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>etr1-1</i>	<i>Arabidopsis thaliana</i>	EMS	dominant
<i>etr1-9;ers1-3</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>FaNYE1OE</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>far1-2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>flty3-4</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>flo2(SALK_138275)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ftsh4-4</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ful-2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>fz1-1: SALK_118335</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>fz1-2: SALK_033745C</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>fz1-3: SALK_152584C</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ga1-3 gai-t6 rga-t2 rgl1-1 rgl2-1</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>gbf1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>gme-1 (CS827235)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>GR2 RNAi</i>	<i>Arabidopsis thaliana</i>	RNAi	recessive
<i>gr2(SALK_040170)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive

<i>GVG:AtSARK</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>HAD6_RNAi</i>	<i>Arabidopsis thaliana</i>	RNAi	recessive
<i>hcar</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>HCAR-OX</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>hda13</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>hda9</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>hda9pwr</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>hpr1-4 edr1</i>	<i>Arabidopsis thaliana</i>	EMS	recessive
<i>iaa17-1 (SALK_065697)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>iaa17-2 (SALK_011820)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>iAtNAP</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>iRPK1</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>iRPK1-GFP</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>iRPK1-GFP/rbohF</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ispF-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ivdh-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>jaw-D/mir319</i>	<i>Arabidopsis thaliana</i>	Activation tag	dominant
<i>jaz7</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>jmj16-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>jub1-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>KAT2as</i>	<i>Arabidopsis thaliana</i>	RNAi	recessive
<i>KAT2ox</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>khz1(SALK_057095C)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>KHZ1-OE</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>khz1khz2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>khz2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>KHZ2-OE</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>KIN10-OE</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>LARP1c-DEX</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>LARP1c-OE</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>LARP1cOE</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>lew1</i>	<i>Arabidopsis thaliana</i>	EMS	recessive
<i>LOX2-RNAi</i>	<i>Arabidopsis thaliana</i>	RNAi	dominant
<i>lux-6</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>mes16-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>mes16-2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>mir164a-4</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>mir164abc</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>mir164b-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>mir164c-2</i>	<i>Arabidopsis thaliana</i>	transposon insertion	recessive
<i>mkk9-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>mpk6-2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>mpk6-3</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>mybh-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive

<i>MYBHox</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>myc2 myc3 myc4</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>MYC2OE</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>MYC3OE</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>MYC4OE</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>myc5(SALK_060048C)</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>MYC5OE</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>nac016-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>NAC016-OX</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>nac1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>nac16</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>nac55</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>NahG Transgene plant</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>nes1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>npr1-1</i>	<i>Arabidopsis thaliana</i>	EMS	recessive
<i>nrt1.5</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>NSR1/MYR2ox</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>ntl4-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ntl4-2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ntl9-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>nye1-1</i>	<i>Arabidopsis thaliana</i>	fast neutron mutagenesis	recessive
<i>oeCIPK14</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>om47-1 (SALK_016767)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>om47-2 (GABI_369G03)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ore1-1</i>	<i>Arabidopsis thaliana</i>	EMS	recessive
<i>ore12-1</i>	<i>Arabidopsis thaliana</i>	EMS	dominant
<i>ore15-1D</i>	<i>Arabidopsis thaliana</i>	EMS	recessive
<i>ore3</i>	<i>Arabidopsis thaliana</i>	EMS	recessive
<i>ore4-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ORE7-OX</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>ORE7/ore7-1D</i>	<i>Arabidopsis thaliana</i>	T-DNA	dominant
<i>ORE7/ore7-2D</i>	<i>Arabidopsis thaliana</i>	T-DNA	dominant
<i>ore9-1</i>	<i>Arabidopsis thaliana</i>	EMS	recessive
<i>ORS1 RNAi line</i>	<i>Arabidopsis thaliana</i>	RNAi	recessive
<i>ors1-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>ors1-1/anac092-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>OxBAG5</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>pad4</i>	<i>Arabidopsis thaliana</i>	T-DNA	dominant
<i>pas2-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>pat13-1 (SALK_015570)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>pat14-1 (SALK_026159)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>Pht1;5 overexpressor</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>phyA</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>PHYBox</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant

<i>pi3k-1: SALK_007281</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>pif1-2pif3-3 pif4-2 pif5-3 (pifq)</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>PIF3ox, pif1-2pif3-3 pif4-2 pif5-3 (pifq)</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>PIF4ox, pif4pif5, pif1-2pif3-3 pif4-2 pif5-3 (pifq)</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>PIF5ox, pif4pif5, pif1-2pif3-3 pif4-2 pif5-3 (pifq)</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>PPDK overexpression line</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>pph-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>prD29A::PYL9</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>Pro35S:YFP-CRS</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>prr9</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>prx33</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>PRX34</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>PRX34RNAi</i>	<i>Arabidopsis thaliana</i>	RNAi	recessive
<i>psal-2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>psat1-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>psat1-2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>pub12</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>pub13</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>pub4-6</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>pwr</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>pyl8-1pyl9</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>PYL8ox</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>rabF1-1 (SAIL_98_E08)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>RabF1OE</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>RabG3box</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>Rap2.4fOE</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>rap2.6L</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>RAP2.6LOE</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>rav1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>RAV1OX</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>rcd1-4</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>rev5</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>rpkl-3</i>	<i>Arabidopsis thaliana</i>	Ds insertion	recessive
<i>rpkl-4</i>	<i>Arabidopsis thaliana</i>	Ds insertion	recessive
<i>rps6a (SALK_012147)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>rps6b (SALK_061539)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>RRTF1oe</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>s3h</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>s40-3a</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>SAG113in</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>SAG113KO</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive

<i>sag12-2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>sag29-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>sag29-2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>SALK_145341</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>sark-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>sasp-1, SALK_147962</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>sasp-2, SALK_063823</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>sau11-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>sau11-2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>saur36</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>SAUR36 overexpressing plants</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>saur36-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>saur36-2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>sgr2-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>SGRLOX</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>sid2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>SINAL7ox</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>SINAPI2-KD</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>snrk2.2/2.3/2.6</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>snrk2.2/3/6</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>soc1-3 ful-2</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>soc1-6 (SALK_138131C)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>soc1-6 pph-1</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>sor1-D</i>	<i>Arabidopsis thaliana</i>	Activation tag	dominant
<i>sor1-D ore9-1</i>	<i>Arabidopsis thaliana</i>	cross	dominant
<i>stn7-1stm8-1</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>tcp2tcp4</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>tcp2tcp4tcp10</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>tf12</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>tic55-II (SALK_086048)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>TOR-OE</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>TOR-OE1</i>	<i>Arabidopsis thaliana</i>	T-DNA	dominant
<i>UGT73C6oe</i>	<i>Arabidopsis thaliana</i>	tansgene	dominant
<i>upl5-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>upl5-2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>vni2-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>vni2/35S:BnNAC5</i>	<i>Arabidopsis thaliana</i>	tansgene	dominant
<i>vps35 b-1vps35c-1</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>vps35a-1 vps35b-2 vps35c-1</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>vps35a-1(SALK_014345)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>vps35c-1(SALK_99735)</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>vtc1</i>	<i>Arabidopsis thaliana</i>	EMS	recessive
<i>vtc2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>why1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive

<i>why1wrky53</i>	<i>Arabidopsis thaliana</i>	cross	recessive
<i>WRKY45RNAi</i>	<i>Arabidopsis thaliana</i>	RNAi	recessive
<i>wrky53</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>WRKY53OE</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>wrky54</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>wrky54wrky70</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>wrky57</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>wrky6</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>wrky70</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>wrky75</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>WRKY75RNAi</i>	<i>Arabidopsis thaliana</i>	RNAi	recessive
<i>yuc6-1D</i>	<i>Arabidopsis thaliana</i>	T-DNA	dominant
<i>vti12</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>iSAG101</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>SAG101RNAi</i>	<i>Arabidopsis thaliana</i>	antisense	recessive
<i>GhNAC12ox</i>	Cotton (<i>Gossypium hirsutum</i>)	Transgene	dominant
<i>GhTZF1ox</i>	Cotton (<i>Gossypium hirsutum</i>)	Transgene	dominant
<i>GhWRKY42ox</i>	Cotton (<i>Gossypium hirsutum</i>)	Transgene	dominant
<i>35S::sppro::RFP::CYP4KDEL</i>	Easter lily (<i>Lilium longiflorum</i>)	Transgene	dominant
<i>pSBI-DREB2</i>	<i>Erianthus arundinaceus</i>	Transgene	recessive
<i>Bj993</i>	Fescue (<i>Festuca pratensis</i> Huds.)	other	recessive
<i>35S::SiNAC1-GFP</i>	Foxtail millet (<i>Setaria italica</i>)	Transgene	dominant
<i>siygl2</i>	Foxtail millet (<i>Setaria italica</i>)	EMS	recessive
<i>spl28</i>	Hwacheongbyeo (an elite Korean japonica cultivar)	N-methyl-N-nitrosourea (MNU) treatment	recessive
<i>PSR26r</i>	Japanese morning glory (<i>Ipomoea nil</i>)	RNAi	recessive
<i>EPH1r</i>	Japanese morning glory (<i>Ipomoea nil</i>).	EMS	recessive
<i>OsETR2-OX</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>OsETR2-RNAi Lines</i>	Rice (<i>Oryza sativa</i>)	RNAi	recessive
<i>ossgr</i>	Rice (<i>Oryza sativa</i>)	N-methyl-N-nitrosourea (MNU) treatment	recessive
<i>aba1-1</i>	Ler	EMS	recessive
<i>bell-1</i>	Ler	EMS	recessive
<i>gin2-1</i>	Ler	EMS	recessive
<i>old1-1/cpr5</i>	Ler	EMS	recessive
<i>old2</i>	Ler	EMS	recessive
<i>old3-1</i>	Ler	EMS	recessive
<i>old5</i>	Ler	EMS	recessive
<i>Pro35S:SPL/NZZ plants</i>	Ler	Transgene	dominant
<i>LcMCII-1ox</i>	<i>Litchi chinensis</i>	Transgene	dominant
<i>ct2-ref</i>	Maize (<i>Zea mays</i>)	EMS	recessive
<i>lox3-4</i>	Maize (<i>Zea mays</i>)	T-DNA	recessive
<i>CCS52A_RNAi</i>	<i>Medicago sativa</i>	RNAi	recessive
<i>MINAC5-YFP</i>	<i>Miscanthus lutarioriparius</i>	Transgene	dominant

<i>MnDREB4A-OE</i>	<i>Mulberry Morus notabilis</i>	Transgene	dominant
<i>irNaMPK4</i>	<i>Nicotiana attenuata</i>	RNAi	recessive
<i>deltandhF/ndhF-deficient tobacco</i>	<i>Nicotiana tabacum</i> other		recessive
<i>GVG:GmSARK</i>	Soybean (<i>Glycine max</i>)	Transgene	dominant
<i>PpCBF1ox</i>	Peach (<i>Prunus persica</i>)	Transgene	dominant
<i>35S::PcFT2</i>	Pear (<i>Pyrus communis</i>)	Transgene	dominant
<i>TRV2::CaCP</i>	Pepper (<i>Capsicum annuum L.</i>)	Transgene	recessive
<i>VIGS-CaPAO</i>	Pepper (<i>Capsicum annuum L.</i>)	Transgene	recessive
<i>DkLOX3-OX</i>	Persimmon (<i>Diospyros kaki L.</i> 'Fupingjianshi')	Transgene	dominant
<i>GVG::etr1-1 Transgene petunias</i>	<i>Petunia</i>	Transgene	dominant
<i>pssgr</i>	Pea (<i>Pisum sativum</i>)	other	recessive
<i>GMP-RNAi</i>	Potato (<i>Solanum tuberosum</i>)	RNAi	recessive
<i>35S:StUBA2a</i>	Potato (<i>Solanum tuberosum</i>)	Transgene	dominant
<i>35S:StUBA2b</i>	Potato (<i>Solanum tuberosum</i>)	Transgene	dominant
<i>35S:StUBA2c</i>	Potato (<i>Solanum tuberosum</i>)	Transgene	dominant
<i>gamma-TMT-silenced plant</i>	potato (<i>Solanum tuberosum</i>)	RNAi	recessive
<i>StHPT_RNAi</i>	potato (<i>Solanum tuberosum</i>)	RNAi	recessive
<i>35S:BnCHMP7</i>	Rapeseed (<i>Brassica napus</i>)	Transgene	dominant
<i>35S:BnNAC87</i>	Rapeseed (<i>Brassica napus</i>)	Transgene	dominant
<i>BnNCED3-OX</i>	Rapeseed (<i>Brassica napus</i>)	Transgene	dominant
<i>cZOGT1-ox</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>cZOGT2-ox</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>nyc4-1</i>	Rice (<i>Oryza sativa</i>)	EMS	recessive
<i>nyc3</i>	rice (<i>Oryza sativa</i>)	EMS	recessive
<i>OsGS1;1-knockout mutant</i>	rice (<i>Oryza sativa</i>)	En-1/Spm-transposon	recessive
<i>onac106-1D</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>ospil1</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>tsd2-1</i>	Rice (<i>Oryza sativa</i>)	T-DNA	recessive
<i>35S-RLS1</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>35S::OsNAC2</i>	Rice (<i>Oryza sativa</i>)	Transgene	recessive
<i>35S:OsHCAR</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>35S:OsWRKY42-cMyc</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>are1-1;are1-2</i>	Rice (<i>Oryza sativa</i>)	cross	recessive
<i>bbs1</i>	Rice (<i>Oryza sativa</i>)	T-DNA	recessive
<i>del</i>	Rice (<i>Oryza sativa</i>)	T-DNA	recessive
<i>dwarf3</i>	Rice (<i>Oryza sativa</i>)	EMS	recessive
<i>dye1-1</i>	Rice (<i>Oryza sativa</i>)	T-DNA	recessive
<i>els4</i>	Rice (<i>Oryza sativa</i>)	T-DNA	recessive
<i>es7</i>	Rice (<i>Oryza sativa</i>)	EMS	recessive
<i>ES7_Cas9</i>	Rice (<i>Oryza sativa</i>)	CRISPR	recessive
<i>FE047(CYP94C2box)</i>	Rice (<i>Oryza sativa</i>)		
<i>Ghd2OE</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>gnt1</i>	Rice (<i>Oryza sativa</i>)	T-DNA	recessive

<i>gogat1</i>	Rice (<i>Oryza sativa</i>)	T-DNA	recessive
<i>Ga-null mutant (DK22)</i>	Rice (<i>Oryza sativa</i>)	T-DNA	recessive
<i>LTS1</i>	Rice (<i>Oryza sativa</i>)	T-DNA	recessive
<i>mhz7-1</i>	Rice (<i>Oryza sativa</i>)	EMS	recessive
<i>noe1</i>	Rice (<i>Oryza sativa</i>)	T-DNA	recessive
<i>OsAHP1-RNAi</i>	Rice (<i>Oryza sativa</i>)	RNAi	recessive
<i>OsAHP2-RNAi</i>	Rice (<i>Oryza sativa</i>)	RNAi	recessive
<i>osakalphagal</i>	Rice (<i>Oryza sativa</i>)	EMS	recessive
<i>Osatg7-1</i>	Rice (<i>Oryza sativa</i>)	T-DNA	recessive
<i>OsCDC48:YFP</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>oscoi1b-1</i>	Rice (<i>Oryza sativa</i>)	T-DNA	recessive
<i>OsDOSOE</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>OsDOS_RNAi</i>	Rice (<i>Oryza sativa</i>)	RNAi	recessive
<i>oself3.1</i>	Rice (<i>Oryza sativa</i>)	T-DNA	recessive
<i>OsFBK12 RNAi</i>	Rice (<i>Oryza sativa</i>)	RNAi	recessive
<i>OsGDCH-RNAi</i>	Rice (<i>Oryza sativa</i>)	RNAi	recessive
<i>oshcar</i>	Rice (<i>Oryza sativa</i>)	T-DNA	recessive
<i>OsHOX33RNAi</i>	Rice (<i>Oryza sativa</i>)	RNAi	recessive
<i>OsLOX2OE</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>OsLOX2RNAi</i>	Rice (<i>Oryza sativa</i>)	RNAi	recessive
<i>OsNAC2-RNAi</i>	Rice (<i>Oryza sativa</i>)	RNAi	recessive
<i>OsPIL1-OX</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>ospls1</i>	Rice (<i>Oryza sativa</i>)	T-DNA	recessive
<i>OsRab7B3OX</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>Ossik2</i>	Rice (<i>Oryza sativa</i>)	T-DNA	recessive
<i>OsSIK2ox</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>OsSWEET15ox</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>OsTDC1OE</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>OsTDC1_RNAi</i>	Rice (<i>Oryza sativa</i>)	RNAi	recessive
<i>OsTZF1-RNAi</i>	Rice (<i>Oryza sativa</i>)	Transgene	recessive
<i>OsTZF1ox</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>OsWRKY42-GFP</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>OsWRKY42OX</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>OsY37</i>	Rice (<i>Oryza sativa</i>)	T-DNA	recessive
<i>pls3</i>	Rice (<i>Oryza sativa</i>)	T-DNA	recessive
<i>PME1ox</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>PME1_RNAi</i>	Rice (<i>Oryza sativa</i>)	RNAi	recessive
<i>ps1-D</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>psd128</i>	Rice (<i>Oryza sativa</i>)	EMS	recessive
<i>pUbi::SPL33</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>rls1</i>	Rice (<i>Oryza sativa</i>)	γ -ray	recessive
<i>rls3</i>	Rice (<i>Oryza sativa</i>)	T-DNA	recessive
<i>RNAiOsAPX4</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>SHTox</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant

<i>sles</i>	Rice (<i>Oryza sativa</i>)	T-DNA	recessive
<i>spl29</i>	Rice (<i>Oryza sativa</i>)	EMS	recessive
<i>spl3</i>	Rice (<i>Oryza sativa</i>)	EMS	recessive
<i>spl32</i>	Rice (<i>Oryza sativa</i>)	EMS	recessive
<i>spl33</i>	Rice (<i>Oryza sativa</i>)	EMS	recessive
<i>UbiP-OsAkalphaGal</i>	Rice (<i>Oryza sativa</i>)	Overexpression	dominant
<i>ASR1_RNAi</i>	Tobacco (<i>Nicotiana tabacum</i>)	RNAi	recessive
<i>OsSgr-GFP</i>	Rice (<i>Oryza sativa</i>)	Transgene	dominant
<i>35S::BpMADS4</i>	Silver birch (<i>Betula pendula Roth</i>)	Transgene	dominant
<i>SIDREB3ox</i>	Tomato (<i>Solanum lycopersicum</i>)	Transgene	dominant
<i>35S::GmNAC065-GFP</i>	Soybean (<i>Glycine max</i>)	Transgene	dominant
<i>35S::GmNAC085-GFP</i>	Soybean (<i>Glycine max</i>)	Transgene	dominant
<i>CRY2ox</i>	Soybean (<i>Glycine max</i>)	Transgene	dominant
<i>CRY2RNAi</i>	Soybean (<i>Glycine max</i>)	RNAi	recessive
<i>GmCIB1ox</i>	Soybean (<i>Glycine max</i>)	Transgene	dominant
<i>GmSARK_RNAi</i>	Soybean (<i>Glycine max</i>)	RNAi	recessive
<i>35S::BiP</i>	soybean(<i>Glycine max</i>)	Transgene	dominant
<i>35S : HaHSFA4a</i>	Sunflower (<i>Helianthus annuus</i>)	Transgene	dominant
<i>35S : HaHSFA9</i>	Sunflower (<i>Helianthus annuus</i>)	Transgene	dominant
<i>IbNAC1ox</i>	Sweet potato	Transgene	dominant
<i>35S::CsHis</i>	Tea (<i>Camellia sinensis</i>)	Transgene	dominant
<i>SAG12:Cin1</i>	Tobacco (<i>Nicotiana tabacum</i>)	Transgene	dominant
<i>TetR:Cin1</i>	Tobacco (<i>Nicotiana tabacum</i>)	Transgene	dominant
<i>NtNAC080CRISPR</i>	Tobacco (<i>Nicotiana tabacum</i>)	CRISPR	recessive
<i>NtNAC080OE</i>	Tobacco (<i>Nicotiana tabacum</i>)	Transgene	dominant
<i>ODC-RNAi</i>	Tobacco (<i>Nicotiana tabacum</i>)	RNAi	recessive
<i>SAG:kn1</i>	tobacco(<i>Nicotiana tabacum</i>)	Transgene	dominant
<i>35S:FYFL</i>	Tomato (<i>Solanum lycopersicum</i>)	Transgene	dominant
<i>OGDH_RNAi</i>	Tomato (<i>Solanum lycopersicum</i>)	RNAi	recessive
<i>35S:SIERF36</i>	Tomato (<i>Solanum lycopersicum</i>)	Transgene	dominant
<i>SIELP2L-RNAi</i>	Tomato (<i>Solanum lycopersicum</i>)	RNAi	recessive
<i>SIERF36ΔEAR</i>	Tomato (<i>Solanum lycopersicum</i>)	Transgene	dominant
<i>SINAP2-KD</i>	Tomato (<i>Solanum lycopersicum</i>)	Transgene	recessive
<i>SINAP2-OX</i>	Tomato (<i>Solanum lycopersicum</i>)	Transgene	dominant
<i>SIORIS02-KD</i>	Tomato (<i>Solanum lycopersicum</i>)	Transgene	dominant
<i>SIEBF1_RNAi</i>	Tomato (<i>Solanum lycopersicum</i>)	RNAi	recessive
<i>SIEBF2_RNAi</i>	Tomato (<i>Solanum lycopersicum</i>)	RNAi	recessive
<i>INVINH1 RNAi</i>	Tomato (<i>Solanum lycopersicum</i>)	RNAi	recessive
<i>dad1-1</i>	Petunia (<i>Petunia hybrida</i>)	Transposon	recessive
<i>dad1-2</i>	Petunia (<i>Petunia hybrida</i>)	Transposon	recessive
<i>Lr34</i>	wheat (<i>Triticum aestivum</i>)	other	recessive
<i>BSMV:TaSCL14</i>	Wheat (<i>Triticum aestivum</i>)	Transgene	dominant
<i>NtNAM-B1_RNAi</i>	<i>Nicotiana tabacum</i>	RNAi	recessive
<i>abi5-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive

<i>AGL15OE</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>apg7-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>arf1-4 dsARF2</i>	<i>Arabidopsis thaliana</i>	T-DNA and RNAi	recessive
<i>atmyb2-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>atmyb2-2</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>drr1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>dsARF2</i>	<i>Arabidopsis thaliana</i>	RNAi	recessive
<i>hmg1-1</i>	<i>Arabidopsis thaliana</i>	T-DNA	recessive
<i>miR164Aox</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>miR164Box</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant
<i>CBF2OE</i>	<i>Arabidopsis thaliana</i>	Transgene	dominant

Supplementary Table S2. List of the *SAGs* that delay leaf senescence in *Arabidopsis*.

Locus Name	Gene Name	Gene Description
AT3G59950	ATG4B	AUTOPHAGY 4b (ATG4b)
AT5G09300	E1A2	2-oxoisovalerate dehydrogenase subunit alpha
AT1G21400	E1A1	2-oxoisovalerate dehydrogenase subunit alpha 1
AT3G54840	RABF1	Ras-related protein 1(RABF1)
AT2G05630	ATG8D	AUTOPHAGY 8D(ATG8D)
AT4G00870	BHLH14	Basic helix-loop-helix 14 (BHLH14)
AT2G27840	HDT4	Histone deacetylase HDT4 (HDT4)
AT3G04030	MYR2	Homeodomain-like superfamily protein(MYR2)
AT1G08620	JMJ16	Lysine-specific demethylase MJM16
AT5G64040	PSAN	Photosystem I reaction center subunit N (PSAN)
AT5G09860	THO1	THO complex subunit 1 (THO1)
AT5G28840	GME	GDP-D-MANNOSE 3',5'-EPIMERASE (GME)
AT1G52340	ABA2	ABA DEFICIENT 2 (ABA2)
AT2G46510	AIB	ABA-INDUCIBLE BHLH-TYPE TRANSCRIPTION FACTOR (AIB)
AT3G02480	ABR	ABA-RESPONSE PROTEIN (ABR)
AT5G64940	ATH13	ABC2 HOMOLOG 13 (ATH13)
AT4G37000	ACD2	ACCELERATED CELL DEATH 2 (ACD2)
AT3G51970	ASAT1	ACYL-COA STEROL ACYL TRANSFERASE 1 (ASAT1)
AT5G13790	AGL15	AGAMOUS-LIKE 15 (AGL15)
AT2G45660	AGL20	AGAMOUS-LIKE 20 (AGL20)
AT5G62165	AGL42	AGAMOUS-LIKE 42 (AGL42)
AT4G20070	AAH	ALLANTOATE AMIDOHYDROLASE (AAH)
AT4G04955	ALN	ALLANTOINASE (ALN)
AT4G36920	AP2	APETALA 2 (AP2)
AT5G02760	APD7	ARABIDOPSIS PP2C CLADE D 7 (APD7)
AT1G20900	AHL27	AT-HOOK MOTIF NUCLEAR-LOCALIZED PROTEIN 27
AT3G07525	ATG10	AUTOPHAGY 10 (ATG10)
AT1G54210	ATG12A	AUTOPHAGY 12 A (ATG12A)
AT3G62770	ATG18a	AUTOPHAGY 18A (ATG18a)
AT3G19190	ATG2	AUTOPHAGY 2 (ATG2)
AT2G44140	ATG4A	AUTOPHAGY 4A (ATG4A)
AT5G17290	APG5	AUTOPHAGY 5 (APG5)
AT3G61710	ATG6	AUTOPHAGY 6 (ATG6)
AT5G45900	APG7	AUTOPHAGY 7 (APG7)
AT4G21980	APG8A	AUTOPHAGY 8A (APG8A)
AT4G04620	ATG8B	AUTOPHAGY 8B (ATG8B)
AT1G62040	ATG8C	AUTOPHAGY 8C (ATG8C)
AT2G45170	ATG8E	AUTOPHAGY 8E (ATG8E)
AT4G16520	ATG8F	AUTOPHAGY 8F (ATG8F)
AT3G60640	ATG8G	AUTOPHAGY 8G (ATG8G)
AT3G15580	APG8H	AUTOPHAGY 8H (APG8H)
AT3G06420	ATG8H	AUTOPHAGY 8H (ATG8H)

AT2G31260	APG9	AUTOPHAGY 9 (APG9)
AT4G30790	ATG11	AUTOPHAGY-RELATED 11 (ATG11)
AT2G38120	AUX1	AUXIN RESISTANT 1 (AUX1)
AT4G31910	BAT1	BR-RELATED ACYLTRANSFERASE1 (BAT1)
AT4G25470	CBF2	C-REPEAT/DRE BINDING FACTOR 2 (CBF2)
AT5G27420	CNI1	CARBON/NITROGEN INSENSITIVE 1 (CNI1)
AT4G35090	CAT2	CATALASE 2 (CAT2)
AT2G38170	CAX1	CATION EXCHANGER 1 (CAX1)
AT3G51860	CAX3	CATION EXCHANGER 3 (CAX3)
AT1G44446	CH1	CHLORINA 1 (CH1)
AT2G42530	COR15B	COLD REGULATED 15B (COR15B)
AT2G42540	COR15A	COLD-REGULATED 15A (COR15A)
AT1G11680	CYP51G1	CYTOCHROME P450 51G1 (CYP51G1)
AT2G39770	CYT1	CYTOKINESIS DEFECTIVE 1 (CYT1)
AT4G36400	D2HGDH	D-2-HYDROXYGLUTARATE DEHYDROGENASE (D2HGDH)
AT5G15410	DND1	DEFENSE NO DEATH 1 (DND1)
AT4G10500	DLO1	DMR6-LIKE OXYGENASE 1 (DLO1)
AT2G25930	ELF3	EARLY FLOWERING 3 (ELF3)
AT2G40080	ELF4	EARLY FLOWERING 4 (ELF4)
AT2G43400	ETFQO	ELECTRON-TRANSFER FLAVOPROTEIN:UBIQUINONE OXIDOREDUCTASE (ETFQO)
AT5G09900	EMB2107	EMBRYO DEFECTIVE 2107 (EMB2107)
AT1G08720	EDR1	ENHANCED DISEASE RESISTANCE 1 (EDR1)
AT1G54040	ESP	EPITHIOSPECIFIER PROTEIN (ESP)
AT1G66340	ETR1	ETHYLENE RESPONSE 1 (ETR1)
AT3G23150	ETR2	ETHYLENE RESPONSE 2 (ETR2)
AT2G40940	ERS1	ETHYLENE RESPONSE SENSOR 1 (ERS1)
AT3G22170	fhv3	FAR-RED ELONGATED HYPOCOTYLS 3 (fhv3)
AT4G15090	FAR1	FAR-RED IMPAIRED RESPONSE 1 (FAR1)
AT5G01600	FER1	FERRETIN 1 (FER1)
AT5G10140	FLC	FLOWERING LOCUS C (FLC)
AT4G00650	FRI	FRIGIDA (FRI)
AT2G26140	ftsh4	FTSH PROTEASE 4 (ftsh4)
AT1G03160	FZL	FZO-LIKE (FZL)
AT2G20570	GPR11	GBF'S PRO-RICH REGION-INTERACTING FACTOR 1 (GPR11)
AT1G14920	GAI	GIBBERELIC ACID INSENSITIVE (GAI)
AT3G54660	GR	GLUTATHIONE REDUCTASE (GR)
AT3G14420	GOX1	GLYCOLATE OXIDASE 1 (GOX1)
AT3G14415	GOX2	GLYCOLATE OXIDASE 2 (GOX2)
AT5G44190	GLK2	GOLDEN2-LIKE 2 (GLK2)
AT3G13960	GRF5	GROWTH-REGULATING FACTOR 5 (GRF5)
AT4G34460	AGB1	GTP BINDING PROTEIN BETA 1 (AGB1)
AT5G35750	HK2	HISTIDINE KINASE 2 (HK2)
AT1G27320	HK3	HISTIDINE KINASE 3 (HK3)

AT1G76490	HMG1	HYDROXY METHYLGLUTARYL COA REDUCTASE 1 (HMG1)
AT3G45300	IVD	ISOVALERYL-COA-DEHYDROGENASE (IVD)
AT1G01260	JAM2	JASMONATE ASSOCIATED MYC2 LIKE 2 (JAM2)
AT4G16430	JAM3	JASMONATE ASSOCIATED MYC2 LIKE 3 (JAM3)
AT1G11755	LEW1	LEAF WILTING 1 (LEW1)
AT5G52300	LTI65	LOW-TEMPERATURE-INDUCED 65 (LTI65)
AT5G52310	LTI78	LOW-TEMPERATURE-INDUCED 78 (LTI78)
AT1G70170	MMP	MATRIX METALLOPROTEINASE (MMP)
AT2G47585	MIR164A	MICRORNA164A (MIR164A)
AT5G01747	MIR164B	MICRORNA164B (MIR164B)
AT5G27807	MIR164C	MICRORNA164C (MIR164C)
AT4G23713	MIR319A	MICRORNA319A (MIR319A)
AT5G49880	MAD1	MITOTIC ARREST DEFICIENT 1 (MAD1)
AT5G67300	MYBR1	MYB DOMAIN PROTEIN R1 (MYBR1)
AT1G34190	NAC017	NAC DOMAIN CONTAINING PROTEIN 17 (NAC017)
AT5G09330	NAC082	NAC DOMAIN CONTAINING PROTEIN 82 (NAC082)
AT5G13180	NAC083	NAC DOMAIN CONTAINING PROTEIN 83 (NAC083)
AT5G22380	NAC090	NAC DOMAIN CONTAINING PROTEIN 90 (NAC090)
AT1G02860	NLA	NITROGEN LIMITATION ADAPTATION (NLA)
AT3G47450	NOA1	NO ASSOCIATED 1 (NOA1)
AT4G11910	NYE2	NONYELLOWING 2 (NYE2)
AT1G32450	NPF7.3	NRT1/ PTR FAMILY 7.3 (NPF7.3)
AT4G14880	OASA1	O-ACETYL SERINE (THIOL) LYASE (OAS-TL) ISOFORM A1
AT1G31040	ORE15	ORESARA15 (ORE15)
AT1G04010	PSAT1	PHOSPHOLIPID STEROL ACYL TRANSFERASE 1 (PSAT1)
AT4G12800	PSAL	PHOTOSYSTEM I SUBUNIT L (PSAL)
AT1G09570	PHYA	PHYTOCHROME A (PHYA)
AT2G18790	PHYB	PHYTOCHROME B (PHYB)
AT3G46640	PCL1	PHYTOCLOCK 1 (PCL1)
AT2G28830	PUB12	PLANT U-BOX 12 (PUB12)
AT3G46510	PUB13	PLANT U-BOX 13 (PUB13)
AT2G23140	PUB4	PLANT U-BOX 4 (PUB4)
AT4G22750	PAT13	PROTEIN ACYLTRANSFERASE 13 (PAT13)
AT3G60800	PAT14	PROTEIN ACYLTRANSFERASE 14 (PAT14)
AT5G34850	PAP26	PURPLE ACID PHOSPHATASE 26 (PAP26)
AT5G50210	QS	QUINOLINATE SYNTHASE (QS)
AT1G32230	RCD1	RADICAL-INDUCED CELL DEATH1 (RCD1)
AT1G15290	REC3	REDUCED CHLOROPLAST COVERAGE 3 (REC3)
AT1G01360	RCAR1	REGULATORY COMPONENT OF ABA RECEPTOR 1 (RCAR1)
AT4G38630	RPN10	REGULATORY PARTICLE NON-ATPASE 10 (RPN10)
AT5G64760	RPN5B	REGULATORY PARTICLE NON-ATPASE SUBUNIT 5B (RPN5B)
AT2G01570	RGA1	REPRESSOR OF GA1-3 1 (RGA1)
AT4G16110	RR2	RESPONSE REGULATOR 2 (RR2)
AT1G59940	ARR3	RESPONSE REGULATOR 3 (ARR3)

AT2G41310	RR3	RESPONSE REGULATOR 3 (RR3)
AT1G10470	ARR4	RESPONSE REGULATOR 4 (ARR4)
AT3G48100	RR5	RESPONSE REGULATOR 5 (RR5)
AT5G62920	ARR6	RESPONSE REGULATOR 6 (ARR6)
AT1G19050	ARR7	RESPONSE REGULATOR 7 (ARR7)
AT3G57040	ARR9	RESPONSE REGULATOR 9 (ARR9)
AT1G66350	RGL1	RGA-LIKE 1 (RGL1)
AT3G03450	RGL2	RGA-LIKE 2 (RGL2)
AT5G17490	RGL3	RGA-LIKE PROTEIN 3 (RGL3)
AT3G07700	SIA1	SALT-INDUCED ABC1 KINASE 1 (SIA1)
AT1G20780	SAUL1	SENESCENCE-ASSOCIATED E3 UBIQUITIN LIGASE 1 (SAUL1)
AT5G01820	SR1	SERINE/THREONINE PROTEIN KINASE 1 (SR1)
AT5G39510	SGR4	SHOOT GRAVITROPSIM 4 (SGR4)
AT5G37890	SINAL7	SINA LIKE 7 (SINAL7)
AT3G01090	KIN10	SNF1 KINASE HOMOLOG 10 (KIN10)
AT3G19220	SCO2	SNOWY COTYLEDON 2 (SCO2)
AT5G01920	STN8	STATE TRANSITION 8 (STN8)
AT1G68830	STN7	STT7 HOMOLOG STN7 (STN7)
AT1G67140	SWEETIE	SWEETIE (SWEETIE)
AT4G09010	TL29	THYLAKOID LUMEN 29 (TL29)
AT2G24820	TIC55-II	TRANSLOCON AT THE INNER ENVELOPE MEMBRANE OF CHLOROPLASTS 55-II (TIC55-II)
AT4G12570	UPL5	UBIQUITIN PROTEIN LIGASE 5 (UPL5)
AT1G60490	VPS34	VACUOLAR PROTEIN SORTING 34 (VPS34)
AT1G26670	VTI1B	VESICLE TRANSPORT V-SNARE 1B (VTI1B)
AT2G17790	VPS35A	VPS35 HOMOLOG A (VPS35A)
AT1G75850	VPS35B	VPS35 HOMOLOG B (VPS35B)
AT3G51310	VPS35C	VPS35 HOMOLOG C (VPS35C)
AT1G14410	WHY1	WHIRLY 1 (WHY1)
AT2G01830	WOL	WOODEN LEG (WOL)
AT2G40750	WRKY54	WRKY DNA-BINDING PROTEIN 54 (WRKY54)
AT1G69310	WRKY57	WRKY DNA-BINDING PROTEIN 57 (WRKY57)
AT3G56400	WRKY70	WRKY DNA-BINDING PROTEIN 70 (WRKY70)
AT4G34900	XDH2	XANTHINE DEHYDROGENASE 2 (XDH2)
AT4G34890	XDH1	XANTHINE DEHYDROGENASE 1 (XDH1)
AT5G25620	YUCA6	YUCCA6 (YUCA6)

Supplementary Table S3. List of the *SAGs* that promote leaf senescence in *Arabidopsis*.

Locus Name	Gene Name	Gene Description
AT4G19890	<i>AtS40-3</i>	Senescence-associated gene S40-3, a homolog of barley HvS40
AT2G20920	<i>CRS</i>	Cell Growth Defect factor 1-related gene Responsive to Senescence (CRS)
AT3G15010	<i>UBA2C</i>	UBP1-associated protein 2C
AT4G28140	<i>ERF054</i>	Ethylene-responsive transcription factor ERF054
AT2G41060	<i>UBA2B</i>	UBP1-associated protein 2B
AT1G66330	<i>AAF</i>	AAF - Senescence-associated protein AAF
AT1G01720	<i>ATAF1</i>	NAC transcription factor (ATAF1)
AT5G08790	<i>ATAF2</i>	NAC transcription factor (ATAF2)
AT4G29100	<i>BHLH68</i>	Basic helix-loop-helix (bHLH) TF (BHLH68)
AT4G37790	<i>HAT22</i>	Homeobox protein HAT22 (HAT22)
AT3G12130	<i>KHZ1</i>	CCCH zinc-finger TF (KHZ1)
AT5G06770	<i>KHZ2</i>	CCCH zinc-finger TF (KHZ2)
AT1G32080	<i>LrgB</i>	A homolog of the bacterial membrane protein LrgB (LrgB)
AT1G49010	<i>MYBS1</i>	R-R-type MYB-like Transcription Factor (MYBS1)
AT1G32640	<i>MYC2</i>	MYC-related transcriptional activator (MYC2)
AT5G46760	<i>MYC3</i>	MYC-related transcriptional activator (MYC3)
AT4G17880	<i>MYC4</i>	MYC-related transcriptional activator (MYC4)
AT3G27110	<i>PGM48</i>	Plastoglobuli (PG)-localized peptidase (PGM48)
AT2G23830	<i>PVA31</i>	VAMP-associated proteins (VAPs) (PVA31)
AT4G23810	<i>WRKY53</i>	WRKY Transcription Factor (WRKY53)
AT1G62300	<i>WRKY6</i>	WRKY Transcription Factor (WRKY6)
AT1G58340	<i>BCD1</i>	BUSH-AND-CHLOROTIC-DWARF 1 (BCD1)
AT2G21660	<i>CCR2</i>	COLD, CIRCADIAN RHYTHM, AND RNA BINDING 2 (CCR2)
AT1G01480	<i>ACS2</i>	1-AMINO-CYCLOPROPANE-1-CARBOXYLATE SYNTHASE 2 (ACS2)
AT4G37770	<i>ACS8</i>	1-AMINO-CYCLOPROPANE-1-CARBOXYLATE SYNTHASE 8 (ACS8)
AT4G08040	<i>ACS11</i>	1-AMINOCYCLOPROPANE-1-CARBOXYLATE SYNTHASE 11 (ACS11)
AT2G22810	<i>ACS4</i>	1-AMINOCYCLOPROPANE-1-CARBOXYLATE SYNTHASE 4 (ACS4)
AT3G49700	<i>ACS9</i>	1-AMINOCYCLOPROPANE-1-CARBOXYLATE SYNTHASE 9 (ACS9)
AT4G11280	<i>ACS6</i>	1-AMINOCYCLOPROPANE-1-CARBOXYLIC ACID SYNTHASE 6
AT5G48880	<i>KAT5</i>	3-KETO-ACYL-COENZYME A THIOLASE 5 (KAT5)
AT1G04620	<i>HCAR</i>	7-HYDROXYMETHYL CHLOROPHYLL A REDUCTASE (HCAR)
AT2G40220	<i>ABI4</i>	ABA INSENSITIVE 4 (ABI4)
AT2G36270	<i>ABI5</i>	ABA INSENSITIVE 5 (ABI5)
AT3G19290	<i>ABF4</i>	ABRE BINDING FACTOR 4 (ABF4)
AT1G45249	<i>ABF2</i>	ABA RESPONSIVE ELEMENTS-BINDING FACTOR 2 (ABF2)
AT4G34000	<i>ABF3</i>	ABA RESPONSIVE ELEMENTS-BINDING FACTOR 3 (ABF3)
AT5G65800	<i>ACS5</i>	ACC SYNTHASE 5 (ACS5)
AT3G44880	<i>ACD1</i>	ACCELERATED CELL DEATH 1 (ACD1)
AT4G24230	<i>ACBP3</i>	ACYL-COA-BINDING DOMAIN 3 (ACBP3)
AT1G27450	<i>APT1</i>	ADENINE PHOSPHORIBOSYL TRANSFERASE 1 (APT1)
AT5G60910	<i>AGL8</i>	AGAMOUS-LIKE 8 (AGL8)
AT5G05700	<i>ATE1</i>	ARGININE-TRNA PROTEIN TRANSFERASE 1 (ATE1)

AT5G65010	<i>ASN2</i>	ASPARAGINE SYNTHETASE 2 (ASN2)
AT1G04250	<i>AXR3</i>	AUXIN RESISTANT 3 (AXR3)
AT1G59750	<i>ARF1</i>	AUXIN RESPONSE FACTOR 1 (ARF1)
AT1G19220	<i>ARF19</i>	AUXIN RESPONSE FACTOR 19 (ARF19)
AT5G62000	<i>ARF2</i>	AUXIN RESPONSE FACTOR 2 (ARF2)
AT5G41410	<i>BEL1</i>	BELL 1 (BEL1)
AT3G63530	<i>BB</i>	BIG BROTHER (BB)
AT4G39400	<i>BRI1</i>	BRASSINOSTEROID INSENSITIVE 1 (BRI1)
AT5G17860	<i>CAX7</i>	CALCIUM EXCHANGER 7 (CAX7)
AT5G37780	<i>CAM1</i>	CALMODULIN 1 (CAM1)
AT1G66410	<i>CAM4</i>	CALMODULIN 4 (CAM4)
AT1G54115	<i>CCX4</i>	CATION CALCIUM EXCHANGER 4 (CCX4)
AT5G37060	<i>CHX24</i>	CATION/H ⁺ EXCHANGER 24 (CHX24)
AT3G62080	<i>CHMP7</i>	CHARGED MULTI-VESICULAR BODY PROTEIN 7 (CHMP7)
AT5G66750	<i>CHR1</i>	CHROMATIN REMODELING 1 (CHR1)
AT2G44050	<i>COS1</i>	COI1 SUPPRESSOR1 (COS1)
AT5G64930	<i>CPR5</i>	CONSTITUTIVE EXPRESSION OF PR GENES 5 (CPR5)
AT5G03730	<i>CTR1</i>	CONSTITUTIVE TRIPLE RESPONSE 1 (CTR1)
AT3G50260	<i>CEJ1</i>	COOPERATIVELY REGULATED BY ETHYLENE AND JASMONATE 1
AT4G34160	<i>CYCD3;1</i>	CYCLIN D3;1 (CYCD3;1)
AT3G50930	<i>BCS1</i>	CYTOCHROME BC1 SYNTHESIS (BCS1)
AT4G11140	<i>CRF1</i>	CYTOKININ RESPONSE FACTOR 1 (CRF1)
AT4G23750	<i>CRF2</i>	CYTOKININ RESPONSE FACTOR 2 (CRF2)
AT5G53290	<i>CRF3</i>	CYTOKININ RESPONSE FACTOR 3 (CRF3)
AT2G46310	<i>CRF5</i>	CYTOKININ RESPONSE FACTOR 5 (CRF5)
AT3G61630	<i>CRF6</i>	CYTOKININ RESPONSE FACTOR 6 (CRF6)
AT1G19270	<i>DA1</i>	DA (LARGE IN CHINESE) 1 (DA1)
AT2G38050	<i>DET2</i>	DE-ETIOLATED 2 (DET2)
AT2G16390	<i>DRD1</i>	DEFECTIVE IN RNA-DIRECTED DNA METHYLATION 1 (DRD1)
AT5G19700	<i>ELS1</i>	EARLY LEAF SENESCENCE 1 (ELS1)
AT1G80350	<i>ERH3</i>	ECTOPIC ROOT HAIR 3 (ERH3)
AT5G10360	<i>EMB3010</i>	EMBRYO DEFECTIVE 3010 (EMB3010)
AT1G74710	<i>EDS16</i>	ENHANCED DISEASE SUSCEPTIBILITY TO ERYSIPIHE ORONTII 16
AT5G03280	<i>EIN2</i>	ETHYLENE INSENSITIVE 2 (EIN2)
AT1G04310	<i>ERS2</i>	ETHYLENE RESPONSE SENSOR 2 (ERS2)
AT3G20770	<i>EIN3</i>	ETHYLENE-INSENSITIVE3 (EIN3)
AT2G27050	<i>EIL1</i>	ETHYLENE-INSENSITIVE3-LIKE 1 (EIL1)
AT5G64440	<i>FAAH</i>	FATTY ACID AMIDE HYDROLASE (FAAH)
AT1G65480	<i>FT</i>	FLOWERING LOCUS T (FT)
AT5G15250	<i>FTSH6</i>	FTSH PROTEASE 6 (FTSH6)
AT4G36730	<i>GBF1</i>	G-BOX BINDING FACTOR 1 (GBF1)
AT4G29130	<i>HXK1</i>	HEXOKINASE 1 (HXK1)
AT5G59220	<i>HAI1</i>	HIGHLY ABA-INDUCED PP2C GENE 1 (HAI1)
AT5G63110	<i>HDA6</i>	HISTONE DEACETYLASE 6 (HDA6)

AT3G44680	<i>HDA9</i>	HISTONE DEACETYLASE 9 (HDA9)
AT2G17265	<i>HSK</i>	HOMOSERINE KINASE (HSK)
AT2G34600	<i>JAZ7</i>	JASMONATE-ZIM-DOMAIN PROTEIN 7 (JAZ7)
AT4G35890	<i>LARP1C</i>	LA RELATED PROTEIN 1C (LARP1C)
AT1G55020	<i>LOX1</i>	LIPOXYGENASE 1 (LOX1)
AT3G45140	<i>LOX2</i>	LIPOXYGENASE 2 (LOX2)
AT1G17420	<i>LOX3</i>	LIPOXYGENASE 3 (LOX3)
AT1G72520	<i>LOX4</i>	LIPOXYGENASE 4 (LOX4)
AT3G49940	<i>LBD38</i>	LOB DOMAIN-CONTAINING PROTEIN 38 (LBD38)
AT2G43790	<i>MPK6</i>	MAP KINASE 6 (MPK6)
AT1G73500	<i>MKK9</i>	MAP KINASE KINASE 9 (MKK9)
AT1G05100	<i>MAPKKK18</i>	MITOGEN-ACTIVATED PROTEIN KINASE KINASE KINASE 18
AT2G42620	<i>MAX2</i>	MORE AXILLARY BRANCHES 2 (MAX2)
AT2G47190	<i>MYB2</i>	MYB DOMAIN PROTEIN 2 (MYB2)
AT5G47390	<i>MYBH</i>	MYB HYPOCOTYL ELONGATION-RELATED (MYBH)
AT5G39610	<i>NAC6</i>	NAC DOMAIN CONTAINING PROTEIN 6 (NAC6)
AT5G63790	<i>NAC102</i>	NAC DOMAIN CONTAINING PROTEIN 102 (NAC102)
AT1G34180	<i>NAC016</i>	NAC DOMAIN CONTAINING PROTEIN 16 (NAC016)
AT1G52890	<i>NAC019</i>	NAC DOMAIN CONTAINING PROTEIN 19 (NAC019)
AT3G15500	<i>NAC3</i>	NAC DOMAIN CONTAINING PROTEIN 3 (NAC3)
AT3G29035	<i>NAC3</i>	NAC DOMAIN CONTAINING PROTEIN 3 (NAC3)
AT1G77450	<i>NAC032</i>	NAC DOMAIN CONTAINING PROTEIN 32 (NAC032)
AT3G04060	<i>NAC046</i>	NAC DOMAIN CONTAINING PROTEIN 46 (NAC046)
AT4G35580	<i>NTL9</i>	NAC TRANSCRIPTION FACTOR-LIKE 9 (NTL9)
AT1G69490	<i>NAP</i>	NAC-LIKE, ACTIVATED BY AP3/PI (NAP)
AT5G46830	<i>NIG1</i>	NACL-INDUCIBLE GENE 1 (NIG1)
AT4G13250	<i>NYC1</i>	NON-YELLOW COLORING 1 (NYC1)
AT4G22920	<i>NYE1</i>	NON-YELLOWING 1 (NYE1)
AT1G64280	<i>NPR1</i>	NONEXPRESSER OF PR GENES 1 (NPR1)
AT5G04900	<i>NOL</i>	NYC1-LIKE (NOL)
AT4G33950	<i>OST1</i>	OPEN STOMATA 1 (OST1)
AT3G27930	<i>OM47</i>	OUTER MEMBRANE 47 (OM47)
AT3G49110	<i>PRXCA</i>	PEROXIDASE CA (PRXCA)
AT3G49120	<i>PRXCB</i>	PEROXIDASE CB (PRXCB)
AT2G33150	<i>PKT3</i>	PEROXISOMAL 3-KETOACYL-COA THIOLASE 3 (PKT3)
AT5G13800	<i>PPH</i>	PHEOPHYTINASE (PPH)
AT2G32830	<i>PHT1;5</i>	PHOSPHATE TRANSPORTER 1;5 (PHT1;5)
AT3G52430	<i>PAD4</i>	PHYTOALEXIN DEFICIENT 4 (PAD4)
AT1G09530	<i>PIF3</i>	PHYTOCHROME INTERACTING FACTOR 3 (PIF3)
AT2G20180	<i>PIL5</i>	PHYTOCHROME INTERACTING FACTOR 3-LIKE 5 (PIL5)
AT3G59060	<i>PIL6</i>	PHYTOCHROME INTERACTING FACTOR 3-LIKE 6 (PIL6)
AT2G43010	<i>PIF4</i>	PHYTOCHROME INTERACTING FACTOR 4 (PIF4)
AT3G52250	<i>PWR</i>	POWERDRESS (PWR)
AT2G46790	<i>PRR9</i>	PSEUDO-RESPONSE REGULATOR 9 (PRR9)

AT5G46790	<i>PYL1</i>	PYR1-LIKE 1 (PYL1)
AT4G27920	<i>PYL10</i>	PYR1-LIKE 10 (PYL10)
AT5G45860	<i>PYL11</i>	PYR1-LIKE 11 (PYL11)
AT5G45870	<i>PYL12</i>	PYR1-LIKE 12 (PYL12)
AT2G26040	<i>PYL2</i>	PYR1-LIKE 2 (PYL2)
AT1G73000	<i>PYL3</i>	PYR1-LIKE 3 (PYL3)
AT2G38310	<i>PYL4</i>	PYR1-LIKE 4 (PYL4)
AT4G01026	<i>PYL7</i>	PYR1-LIKE 7 (PYL7)
AT4G17870	<i>PYR1</i>	PYRABACTIN RESISTANCE 1 (PYR1)
AT5G05440	<i>PYL5</i>	PYRABACTIN RESISTANCE 1-LIKE 5 (PYL5)
AT4G15530	<i>PPDK</i>	PYRUVATE ORTHOPHOSPHATE DIKINASE (PPDK)
AT1G22740	<i>RABG3B</i>	RAB GTPASE HOMOLOG G3B (RABG3B)
AT1G69270	<i>RPK1</i>	RECEPTOR-LIKE PROTEIN KINASE 1 (RPK1)
AT4G34410	<i>RRTF1</i>	REDOX RESPONSIVE TRANSCRIPTION FACTOR 1 (RRTF1)
AT1G01360	<i>RCAR1</i>	REGULATORY COMPONENT OF ABA RECEPTOR 1 (RCAR1)
AT5G53160	<i>RCAR3</i>	REGULATORY COMPONENTS OF ABA RECEPTOR 3 (RCAR3)
AT1G13260	<i>RAV1</i>	RELATED TO ABI3/VP1 1 (RAV1)
AT1G64060	<i>RBOH F</i>	RESPIRATORY BURST OXIDASE PROTEIN F (RBOH F)
AT4G27410	<i>RD26</i>	RESPONSIVE TO DESICCATION 26 (RD26)
AT5G60690	<i>REV</i>	REVOLUTA (REV)
AT1G79850	<i>RPS17</i>	RIBOSOMAL PROTEIN S17 (RPS17)
AT4G31700	<i>RPS6</i>	RIBOSOMAL PROTEIN S6 (RPS6)
AT5G14930	<i>SAG101</i>	SENESCENCE-ASSOCIATED GENE 101 (SAG101)
AT5G13170	<i>SAG29</i>	SENESCENCE-ASSOCIATED GENE 29 (SAG29)
AT4G30520	<i>SARK</i>	SENESCENCE-ASSOCIATED RECEPTOR-LIKE KINASE (SARK)
AT2G45210	<i>SAUR36</i>	SMALL AUXIN UPREGULATED 36 (SAUR36)
AT3G50500	<i>SNRK2.2</i>	SNF1-RELATED PROTEIN KINASE 2.2 (SNRK2.2)
AT4G27330	<i>SPL</i>	SPOROCTELESS (SPL)
AT1G44000	<i>SGRL</i>	STAY-GREEN LIKE (SGRL)
AT5G66880	<i>SNRK2.3</i>	SUCROSE NONFERMENTING 1(SNF1)-RELATED PROTEIN KINASE 2.3 (SNRK2.3)
AT1G50030	<i>TOR</i>	TARGET OF RAPAMYCIN (TOR)
AT2G31070	<i>tcp10</i>	TCP DOMAIN PROTEIN 10 (tcp10)
AT3G15030	<i>TCP4</i>	TCP FAMILY TRANSCRIPTION FACTOR 4 (TCP4)
AT4G18390	<i>TCP2</i>	TEOSINTE BRANCHED 1, CYCLOIDEA AND PCF TRANSCRIPTION FACTOR 2 (TCP2)
AT5G17690	<i>TFL2</i>	TERMINAL FLOWER 2 (TFL2)
AT3G56860	<i>UBA2A</i>	UBP1-ASSOCIATED PROTEIN 2A (UBA2A)
AT5G42270	<i>VARI</i>	VARIEGATED 1 (VAR1)
AT4G26850	<i>VTC2</i>	VITAMIN C DEFECTIVE 2 (VTC2)
AT3G01970	<i>WRKY45</i>	WRKY DNA-BINDING PROTEIN 45 (WRKY45)
AT5G13080	<i>WRKY75</i>	WRKY DNA-BINDING PROTEIN 75 (WRKY75)
