**Supplementary data:**

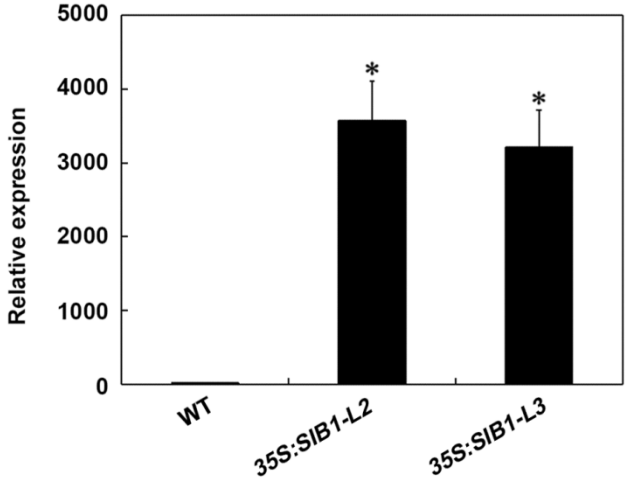


**Fig. S1. Determination of *SIB1* overexpressing plants**. qRT-PCR analysis for *SIB1*-overexpressing plants. Transcript levels of *SIB1* in WT were arbitrarily set to 1. *ACTIN2* and *UBQ5* were used as internal controls. Values are means ± SD of three independent biological replicates. * $P < 0.05$, Student's t-test compared with WT.

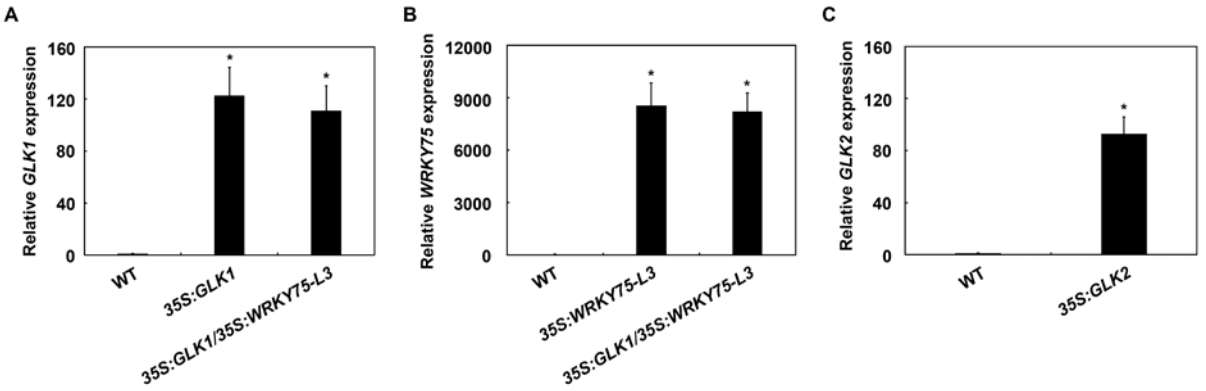


**Fig. S2. Determination of *GLK1*, *GLK2* and *WRKY75* overexpressing plants**. qRT-PCR analysis for *GLK1*-、*GLK2*- and *GLK1/WRKY75*-overexpressing plants. Transcript levels of *GLK1*、*GLK2* or *WRKY75* in WT were arbitrarily set to 1. *ACTIN2* and *UBQ5* were used as internal controls. Values are means ± SD of three independent biological replicates. * $P < 0.05$, Student's t-test compared with WT.

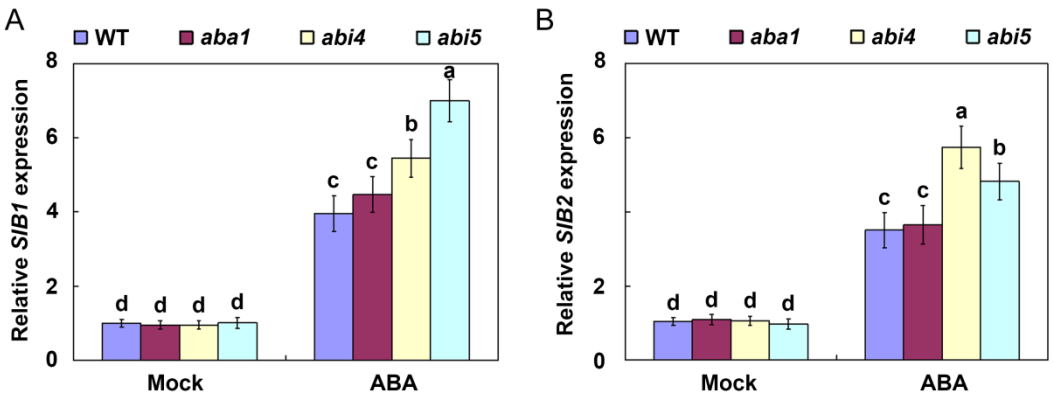


**Fig. S3. Determination of *SIBs* expression in ABA synthesis or signaling mutants.** qRT-PCR analysis of *SIBs* in the indicated genotypes. Transcript levels of *SIB1* and *SIB2* in non-treated WT leaves were arbitrarily set to 1. *ACTIN2* and *UBQ5* were used as internal controls. Error bars represent ±SD from three independent biological replicates. Bars with different letters are significantly different from each other (ANOVA; $P < 0.05$).

## Supplementary Table S1.

**Primers used to qRT-PCR analysis of gene expression:**

| | |
|---|---|
| **GLK1-q1:** | **CCAAACACTTACCTCCGCCT** |
| **GLK1-q2:** | **GGCGGTGCTCTAAATCTCGT** |
| **GLK2-q1:** | **TTCAAGCATCGGTGTTCCCA** |
| **GLK2-q2:** | **TTCAGTCCCAAAGGAAGCGG** |
| **SAG12-q1:** | **ATCCAAAAGCAACTTCTATTACAGG** |
| **SAG12-q2:** | **CCACTGCCTTCATCAGTGC** |
| **SAG29-q1:** | **GCCACCAGGGAGAAAAGG** |
| **SAG29-q2:** | **CCACGAAATGTGTTACCATTAGAA** |
| **SIB1-q1:** | **CGACTTTTCTCACCACGACA** |
| **SIB1-q2:** | **TCGGAGGAAGGGGAATAGAT** |
| **SIB2-q1:** | **GTCAAGACGCCGCTGATCTA** |
| **SIB2-q2:** | **GCCGACATCTGAGGAGCATT** |
| **WRKY75-q1:** | **ATATGGCCAAAAGGCCGTCA** |
| **WRKY75-q2:** | **TGCTCGAAGTTTTCGGTGGA** |
| **ACTIN2-q1:** | **TGTGCCAATCTACGAGGGTTT** |
| **ACTIN2-q2:** | **TTTCCCGCTCTGCTGTTGT** |
| **UBQ5-q1:** | **GTTAAGCTCGCTGTTCTTCAGT** |
| **UBQ5-q2:** | **TCAAGCTTCAACTCCTTCTTTC** |

**Primers used to LCI analysis:**

| | |
|---|---|
| **cLUC-SIB1-1:** | **ATCCCGGGGCATGGAGTCATCATCGTCGACTTTT** |
| **cLUC-SIB1-2:** | **ATCCCGGGTTCACATAGAATCGATGCTTCCAAA** |
| **cLUC-SIB2-1:** | **ATCCCGGGGCATGGATCAGTCATCATCAACGTTG** |
| **cLUC-SIB2-2:** | **ATCCCGGGTTCAGAGAGAACCAATGCTTCCTAAA** |
| **nLUC-WRKY75-1:** | **ATCCCGGGGCATGGAGGGATATGATAATGGGTC** |
| **nLUC-WRKY75-2:** | **ATCCCGGGTGAAAGAAGAGTAGATTTGCATTTGAG** |

**Primers used to yeast two hybrid:**

| | |
|---|---|
| **AD-SIB1-1:** | **ATAGAATTCATGGAGTCATCATCGTCGACTTTT** |
| **AD-SIB1-2:** | **ATAGGATCCATTATCACATAGAATCGATGCTTCCA** |
| **AD-SIB2-1:** | **ATAGAATTCATGGATCAGTCATCATCAACGTT** |
| **AD-SIB2-2:** | **ATAGAGCTCTCAGTGCCGAAACAAAACATT** |
| **BD-WRKY75-1:** | **AAGAATTCATGGAGGGATATGATAATGGG** |
| **BD-WRKY75-2:** | **ATAGGATCCCTAGAAAGAAGAGTAGATTTGCATT** |

**Primers used to transactivation analysis:**

| | |
|---|---|
| **GLK1p-LUC-1:** | **ATCCCGGGTAGCTATTTCCAAGTTAACAGGAGAATC** |
| **GLK1p-LUC-2:** | **ATCCCGGGCGATCAATCTTCACTTGTAGATCCAA** |
| **35S-SIB1-1:** | **ATGGATCCATGGAGTCATCATCGTCGACTTTT** |
| **35S-SIB1-2:** | **ATTCTAGATCACATAGAATCGATGCTTCCAAA** |
| **35S-SIB2-1:** | **ATTCTAGAATGGATCAGTCATCATCAACGTTG** |

**35S-SIB2-2:** ATGTCGACTCAGAGAGAACCAATGCTTCCTAAA
**35S-WRKY75-1:** ATGGATCCATGGAGGGATATGATAATGGGTC
**35S-WRKY75-2:** ATGTCGACCTAGAAAGAAGAGTAGATTTGCATTTG

**Primers used to mutant identification:**

**WRKY75-m1:** TTGGAGATTGATTCGAATTGG
**WRKY75-m2:** AACACGTACACGACGTCATTG
**WRKY75-m3:** TCGAGCATATTCTCACTCAAATGC
**WRKY75-m4:** GGATCCAAAGATTTCAGGCTCAATTAC
**Spm32:** TACGAATAAGAGCGTCCATTTTAGAGTGA
**Salk-KO:** AAACGTCCGCAATGTGTTAT
**sib1-4-LP:** CGATGAGAACTCGATAACCTGAC
**sib1-4-RP:** AATCATCCCACCTATCGGAAG
**sib2-1-LP:** GCGTCTATTATACAGAGATGGGG
**sib2-1-RP:** TGTCATGGAGACACGATGAAC
**sm_KO:** TACGAATAAGAGCGTCCATTTTAGAGTGA

**Primers used to generate SIB1 overexpression transgenic plants:**

**35S-SIB1-GFP-1:** ATGGATCCATGGAGTCATCATCGTCGACTTT
**35S-SIB1-GFP-2:** ATTCTAGACATAGAATCGATGCTTCCAAAGTC

**Primers used to Pull-Down:**

**GST-SIB1-1:** ATGGATCCATGGAGTCATCATCGTCGACTTT
**GST-SIB1-2:** ATGAATTCCATAGAATCGATGCTTCCAAAGTC
**GST-SIB2-1:** ATGAATTCATGGATCAGTCATCATCAACGTTG
**GST-SIB2-2:** ATCTCGAGGAGAGAACCAATGCTTCCTAAAGC
**His-WRKY75-1:** ATGGATCCATGGAGGGATATGATAATGGGTC
**His-WRKY75-2:** ATGAATTCGAAAGAAGAGTAGATTTGCATTTGAG

**Primers used to qRT-PCR amplification of *GLK1* or*GLK2* promoter:**

**GLK1-W1-1:** CAAAACCACTCAAATATTCAACT
**GLK1-W1-2:** AATTCCACATACTTTCAGGCC
**GLK1-W2,3-1:** CTTCCACAGCTTAATTTGCGAG
**GLK1-W2,3-2:** CTTGGTTTTGGTCTGTCCCAAC
**GLK1-W4-1:** CCACATTTAGAACTAGGCATAT
**GLK1-W4-2:** GATACATGTAAACATCTGATCGTTTG
**GLK2-W1-1:** GAGGCACCAATTTTTTATGCCAC
**GLK2-W1-2:** GTCTCTATAACACATGTTATTGAGTC
**GLK2-W2,3,4-1:** ACGCATTTGCTTAATTGCTAGTCG
**GLK2-W2,3,4-2:** GACAGTTTCCTTTTAAACATTATGG