Supplementary Material

# Supplementary Figures and Tables

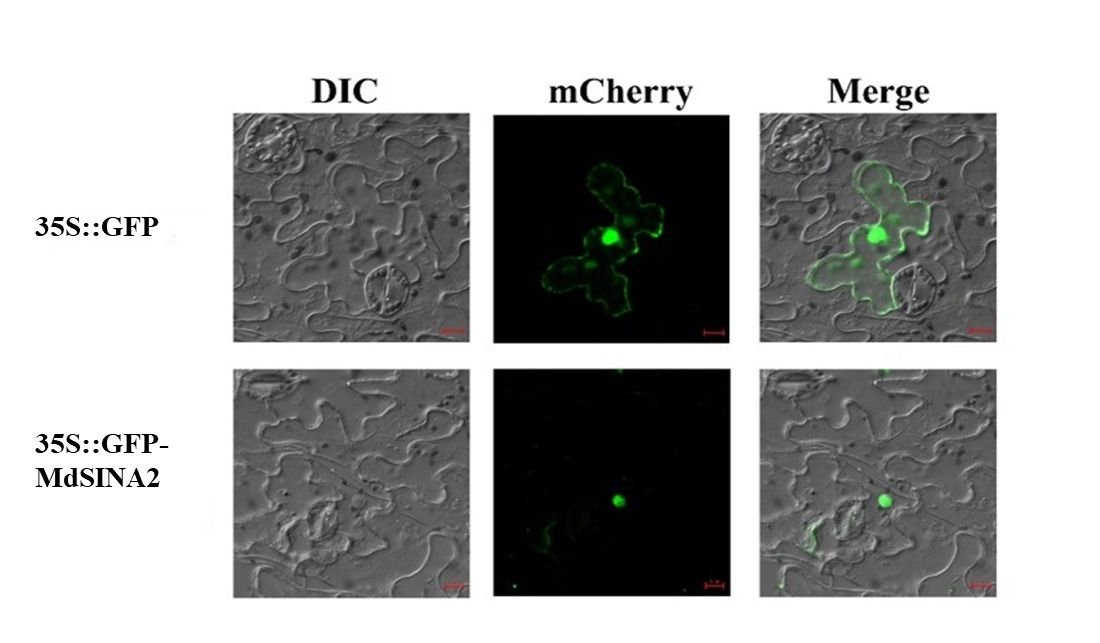
**Figure S1.** Subcellular localization of the MdSINA2 protein. Recombinant plasmid *35S::GFP-MdSINA2* and control *35S: :GFP* was transiently expressed in the epidermal cells of *N. benthamiana* leaves. Scale bar, 10 μm.

**Figure S2.** Figure S2. *MdSINA2* transgenic materials were identified. **(A)** *MdSINA2-OX* calli was verified by mobility of dNA in gel electrophoresis. The recombinant plasmid of PRI-MdSINA2 was used as a positive control. **(B)** *MdSINA2-OX* calli was verified by Western blotting. The protein extract of WT calli was used as a negative control. **(C)** *MdSINA2-OX Arabidopsis* was verified by mobility of dNA in gel electrophoresis. **(D)** DNA sequencing proved the successful acquisition of *MdSINA2C74S* transgenic calli.

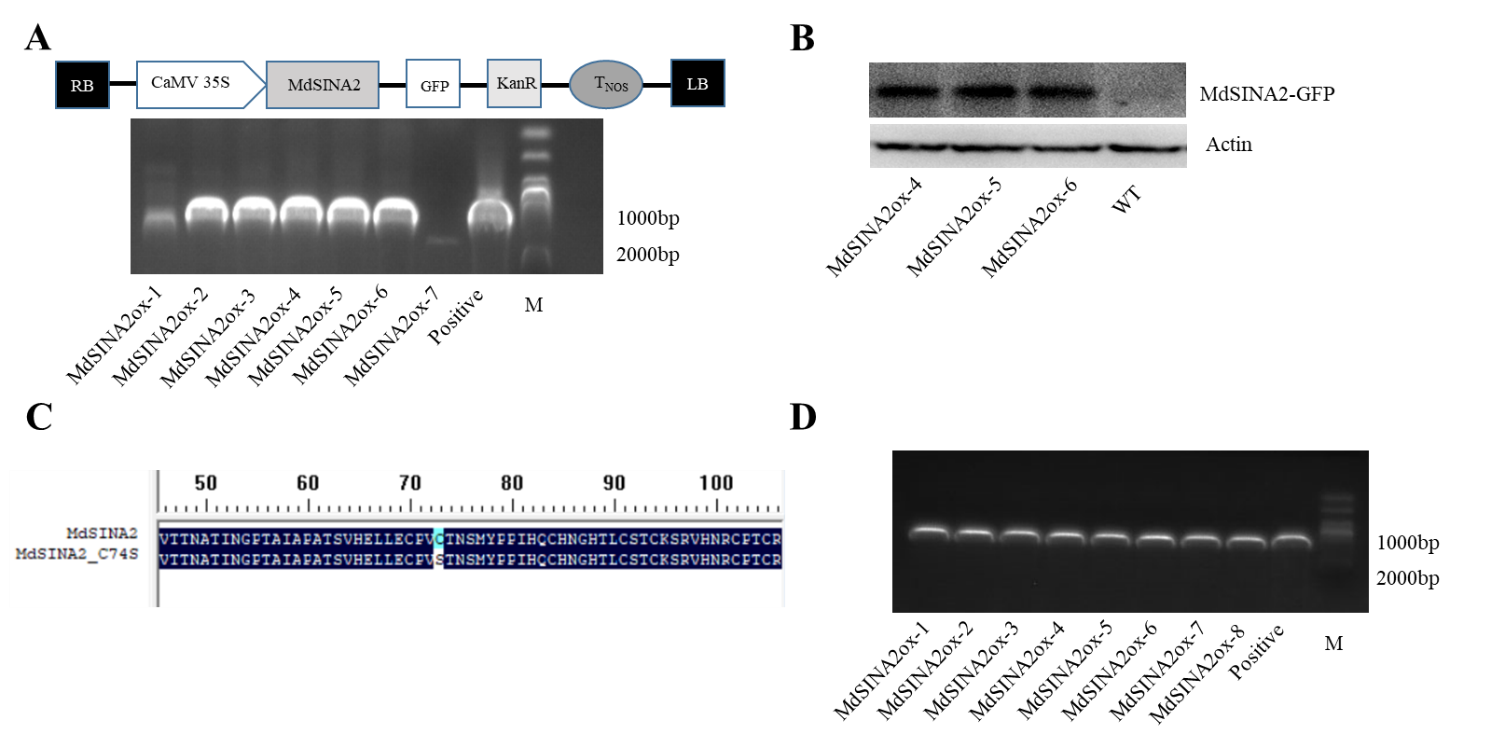
**Table S1.** Primer sequences used in qRT-PCR analysis.

**Table S2.** Primer sequences used in Y2H assay.

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**Figure S2.** *MdSINA2* transgenic materials were identified. **(A)** *MdSINA2-OX* calli was verified by mobility of DNA in gel electrophoresis. The recombinant plasmid of *PRI-MdSINA2* was used as a positive control. (B) *MdSINA2-OX* calli was verified by Western blotting. The protein extract of WT calli was used as a negative control. (C) *MdSINA2-OX* *Arabidopsis* was verified by mobility of DNA in gel electrophoresis. (D) DNA sequencing proved the successful acquisition of *MdSINA2C73S*transgenic call.



**Table S1.** Primer sequences used in qRT-PCR analysis.

|  |  |
| --- | --- |
| Primer name | sequence (5’ to 3’) |
| MdSINA1-F  MdSINA1-R  MdSINA2-F  MdSINA2-R  MdSINA3-F  MdSINA3-R  MdSINA4-F  MdSINA4-R  MdSINA5-F  MdSINA5-R  MdSINA6-F  MdSINA6-R  MdSINA7-F  MdSINA7-R  MdSINA8-F  MdSINA8-R  MdSINA9-F  MdSINA9-R  MdSINA10-F  MdSINA10-R  MdSINA11-F  MdSINA11-R | ATAATCGGTGCCCAACGTGT  CTGAGCACCCAAGAGAGCAA  CCTTTCCTGGTTGCCCATCT  TGTTAGCATCCATGTGGCGT  AACTGCCCCTATGCTGGTTC  TGAAAGTGCTGCCATTGTGC  ATGGGTGACGATGATGAGGC  TGACTGTCACGGACCTTTCG  TCGAGAAAAACTCGGCGACA  GGATCTCCATGCACCCCAAA  TGCCCTGTGTGCTTAAATGC  TGAACCCTTGGTTTGCAACC  ATGGCCGAAAGCTGATTTGG  GAAGAAAAGCGCCATGTTGC  AGCATGAATCGGTGTGCAAC  TGAATGTGCATCCTGTGTGC  TTGGCCGTCAGTTTTGCTTG  TGCTTCGCCTCATCATCATC  TGCACTTTGAGGCTTTCCAG  TTACGGCCATTTGCACCAAC  TTTGCACTTTGAGGCCTTCC  TTACGGCCATTTGCACCAAC |

**Table S2.** Primer sequences used in Y2H assay.

|  |  |
| --- | --- |
| Primer name | sequence (5’ to 3’) |
| MdSINA1-F  MdSINA1-R  MdSINA2-F  MdSINA2-R  MdSINA3-F  MdSINA3-R  MdSINA4-F  MdSINA4-R  MdSINA5-F  MdSINA5-R  MdSINA6-F  MdSINA6-R  MdSINA7-F  MdSINA7-R  MdSINA8-F  MdSINA8-R  MdSINA9-F  MdSINA9-R  MdSINA10-F  MdSINA10-R  MdSINA11-F  MdSINA11-R | ATGGAATCAGACATCATTGAAAGTCT  AACCGCAATCGTACGCATTACTTC  ATGGACTTGGAAAGCATCGAGT  GCTACACAGGTTTGGTATGCAC  ATGGCATCTAGTAGTCCATTTTTTGA  CTGTTCCTTCCATATCCTTCCGG  ATGTCTCCTGGAGGTCGCTTCTT  GTGTTCTTTCCATATACGTCCG  ATGGAGGAGGACTGTTTTGTTGATA  GGCACTGTTGTCCTTCCAAATC  ATGGCATCCAGTAGTCCATTTTTTG  CTGTTCCTTCCATATCCTTCCGG  ATGGAATCAGACATCATTGAAAGTT  GCTACAGAGAGGTATGCAGGTC  ATGGACTTGGAAAGCATCGAGTGT  GCTACACAGGTTTGCTATGCA  ATGTCTCCTGGAGGTCGCTTCTG  GTGTTCTTTCCATATACGGCCG  ATGGCAATCACAAAGTCAGAGACA  TTCTTCTTTCCATATACGGCCAG  ATGGCAATCGCTAAGTCGGA  TTCTTCTTTCCATATACGGCCAG |