

A.

GRF1 5' - UCGUUCAAGAAAGCCUGUGGAA - 3'
 : x||||||| ||| x|||||||
miR396a 3' - GUCAAGUUCUUUCG-ACACCUU - 5'

B.

GRF2 5' - UCGUUCAAGAAAGCCUGUGGAA - 3'
 : x||||||| ||| x|||||||
miR396a 3' - GUCAAGUUCUUUCG-ACACCUU - 5'

C.

GRF3 5' - CCGUUCAAGAAAGCCUGUGGAA - 3'
 | x||||||| ||| x|||||||
miR396a 3' - GUCAAGUUCUUUCG-ACACCUU - 5'

D.

GRF7 5' - UCGUUCAAGAAAGCAUGUGGAA - 3'
 : x||||||| ||| x|||||||
miR396a 3' - GUCAAGUUCUUUCG-ACACCUU - 5'

E.

GRF8 5' - UCGUUCAAGAAAGCAUGUGGAA - 3'
 : x||||||| ||| x|||||||
miR396a 3' - GUCAAGUUCUUUCG-ACACCUU - 5'

F.

GRF9 5' - ACGUUCAAGAAAGCUUGUGGAA - 3'
 xx||||||| ||| x|||||||
miR396a 3' - GUCAAGUUCUUUCG-ACACCUU - 5'

Figure S1. Schematic representation of the base pairing between the miR396a sRNA and its six target genes belonging to the *GRF* transcription factor gene family. The duplex which forms between the miR396a sRNA and its target gene transcripts (**A**) *GRF1* (AT2G22840), (**B**) *GRF2* (AT4G37740), (**D**) *GRF7* (AT5G53660), and (**E**) *GRF8* (AT4G24150) harbors 2.5 mismatched base pairings at nucleotide positions 8, 20 and 21 (G:U wobble pairing) with respect to the 5' terminus of the miR396a sRNA. The duplex which forms between the miR396a sRNA and its target gene transcripts (**C**) *GRF3* (AT2G36400), and (**F**) *GRF9* (AT2G45480) harbors 2 (nucleotide positions 8 and 20) and 3 (nucleotide positions 8, 20 and 21) mismatched base pairings respectively. (**A-E**) A mismatched base pair is represented by a cross symbol (x), a G:U wobble pairing is represented by a colon symbol (:), and a base pairing is depicted by an upright solid line (|).

Supplementary Table S1: DNA oligonucleotides used in this study for cDNA synthesis and RT-qPCR analysis.

| Transcript | Gene ID | Oligonucleotide sequence (5' to 3') | |
|----------------------|-----------|--|--|
| <i>P5CS1</i> | AT2G39800 | FP: GTTTTGAAATCCCGACCTGA | |
| | | RP: TTACCCCCAACAGTCTCTGG | |
| <i>GRF1</i> | AT2G22840 | FP: CGTCGCATAAACACAAGCCTCG | |
| | | RP: ATTTCAGCTCTCGGGCAA | |
| <i>GRF2</i> | AT4G37740 | FP: CTTGGCCTGAAGAGCTGACA | |
| | | RP: GTGTGTGGAGGAAGGGGATG | |
| <i>GRF3</i> | AT2G36400 | FP: CCATACGAGTCCCACATCGG | |
| | | RP: CTGAGCTCATGGGGTTGAA | |
| <i>GRF7</i> | AT5G53660 | FP: CATCCCCCACCGTTAGATCG | |
| | | RP: TGCTTCATGCTTCCGACAT | |
| <i>GRF8</i> | AT4G24150 | FP: GCTGCTGTGACTGTAGCAGA | |
| | | RP: CTCATGCCATTGAGCTTCGC | |
| <i>GRF9</i> | AT2G45480 | FP: CTCACATGAGAATGCCGGGT | |
| | | RP: ATCAGAAACTCGGGCAGTG | |
| <i>NCER1</i> | AT5G58980 | FP: GACCAGGCTACCCGTATGAA | |
| | | RP: TGCATGACGATAGTCACCTTCC | |
| <i>NCER2</i> | AT1G07380 | FP: TGAGATGTGCTATGGCGTG | |
| | | RP: TGGCGGTAATCAACCTTCCC | |
| <i>NCER3</i> | AT2G38010 | FP: TCCGGGCTACCCGTATGAAT | |
| | | RP: CCCCTGCAGCTTCTCTGTAG | |
| <i>UBI10</i> | AT4G05320 | FP: GGCCTTGTATAATCCCTGATGAATAAG | |
| | | RP: AAAGAGATAACAGGAACGGAAACATA | |
| Universal-SLR | | RP: CCAGTGCAGGGTCCGAGGTA | |
| snoR101 | | FP: CTTCACAGGTAAGTCGCTTG | |
| | | RP: AGCATCAGCAGACCAGTAGTT | |
| miR396 | | FP: GCGCGTTCACAGCTTCTGAAC | |
| | | RTSL: GTCGTATCCAGTGCAGGGTCCGAGGTATTGCACTGGATACGACAAGTTC | |