

Supplemental Figure S1. Expression patterns and protein localizations of OsMADS23, OsMADS27a and OsMADS57. (A) RT-PCR analysis of the

expression of *OsMADS23*, *OsMADS27a* and *OsMADS57* in different rice tissues. (B) OsMADS23-GFP, OsMADS27a-GFP and OsMADS57-GFP located in the nucleus in rice protoplasts. 4', 6-diamidino-2-phenylindole (DAPI) is a nuclear staining dye.

Figure S2

| GST::OsMADS23 | + | + | - | - | - | - |
|-------------------|---|---|---|---|---|---|
| GST::OsMADS27a | - | - | + | + | - | - |
| GST::OsMADS57 | - | - | - | - | + | + |
| Probe | - | + | - | + | - | + |
| Mutant probe | + | - | + | - | + | - |
| Mutant competitor | - | + | - | + | - | + |



Probe sequence: gtgctagaaatag<u>ctatattttggg</u>acgga Mutant probe sequence: gtgctagaaata<u>gaaaaaaaaaag</u>gacgga

Supplemental Figure S2. EMSAs showed that OsMADS23, OsMADS27a and OsMADS57 bound to the CArG motif of the *OsRDR1* promoter, but not the CArG mutant sequence.

Figure S3



Supplemental Figure S3. OsMADS23, OsMADS27a and OsMADS57 repress the expression of *OsRDR1* through binding to the CArG motifs. (A) The schematic structures of the effector and reporter constructs for transient expression assay in *Nicotiana benthamiana* leaves, in which *OsMADS23*, *OsMADS27a* and *OsMADS57* were under the control of the CaMV 35S promoter, the *GUS* reporter gene harboring an intron was driven by the full-length or CArG-deleted *OsRDR1* promoter and the *Renilla luciferase* (*LUC*) gene derived by the 35S promoter was used as an internal reference. (B,C) Transient expression assay in *Nicotiana benthamiana* leaves. The relative GUS activities were normalized to the activities of Renilla luciferase (LUC) and averaged from three biological repeats. The error bars indicate \pm standard error (SE). Asterisks indicate significant differences compared with the empty vector samples (Student's *t*-test analysis, **P* < 0.05).

Figure S4



Supplemental Figure S4. miR444 accumulation was induced by virus infection in RSV-insusceptible rice plants. RSV-insusceptible (*Oryza sativa ssp. japonica* Zhendao88) rice plants were inoculated by RSV, then accumulation of miR444 and miR528 was estimated by small RNA gel blot at 7- and dpi. 5S rRNA bands were visualized by ethidium bromide staining and served as a loading control.