



Figure S4. Generation of constructs to express amiRNAs from chimeric *AtMIR390a-OsL* precursors.

(a) Design of the two overlapping oligonucleotides containing *AtMIR390a* and *OsMIR390* basal stem and distal stem loop sequences, respectively. Sequences covered by the forward and reverse oligonucleotides are represented with solid and dotted lines, respectively. Nucleotides of *AtMIR390a* and *OsMIR390* precursors are in black and grey, respectively. Nucleotides of the amiRNA guide strand, and amiRNA* strand are in blue, and green respectively. Other *AtMIR390a* nucleotides that may be modified for preserving authentic *AtMIR390a* precursor secondary structure are in red. Rules for assigning identity to position 9 of amiRNA* are indicated.

Figure S4 (Cont.) (b) Diagram of the steps for generating constructs for expressing amiRNAs from chimeric *AtMIR390a-OsL* precursors. The amiRNA insert obtained after annealing the two overlapping oligonucleotides has 5'TGTA and 5'AATG overhangs and is directly inserted in a directional manner into an *AtMIR390a-B/c* vector previously linearized with *BsaI*. Nucleotides of the *BsaI* sites and those arbitrarily chosen and used as spacers between the *BsaI* recognition sites and the *AtMIR390a* sequence are in purple and light brown, respectively. Other details are as described in (a).

(c) Flow chart of the steps from miRNA construct generation to plant transformation.