Supplemental Table S1

Primers for amiRNA cloning with engineered pre-miR319a as backbone

Primer name	Primer sequences (5' to 3')
F-*EcoRI*	XXXGAATTCATGTTTTAGGAATATATATGTAGANNNNNNNNNNNNNNNNNNNNNNNTCACAGGTCGTGATATGATTC
R-*XbaI*	XXXTCTAGAAAATTGGAATACAAAAGAGAGANNNNNNNNNNNNNNNNNNNNNNNTCAAAGAGAATCAATGATCCA

XXX: additional nucleotides to ensure efficient restriction digestion of PCR products.

N_{21}: capitalized nucleotides in Oligo III designed by WMD3 "Oligo" algorithm.

N_{21}: capitalized nucleotides in Oligo III designed by WMD3 "Oligo" algorithm.

> Arabidopsis pre-miR319a-based pre-amiRNA sequences

(The restriction sites of *Eco*RI and *Xba*I are unlined, and the modified sites are in bold. The amiRNA and amiRNA* highlighted in magenta and blue, respectively)

TCGAGCAAACACACGCTCGGACGCATATTACACATGTTCATACACTTAATACTCG
CTGTTTTGAATTCATGTTTTAGGAATATATATGTAGAGGCATTTCCAACGTCCCTT
TTTCACAGGTCGTGATATGATTCAATTAGCTTCCGACTCATTCATCCAAATACCGA
GTCGCCAAAATTCAAACTAGACTCGTTAAATGAATGAATGATGCGGTAGACAAA
TTGGATCATTGATTCTCTTTGATAAAGGGTCGTTGGAAATACCTCTCTCTTTTGTA
TTCCAATTTTCTAGATTAATCTTTCCTGCACAAAAACATGCTTGATCCACTAAGTG
ACATATATGCTGCCTTCGTATATATAGTTCTGGTAAAATTAACATTTTGGGTTTAT
CTTTATTTAAGGCATCGCCATGACTAGT

Supplemental Table S2

Primers for amiRNA cloning with engineered pre-miR528 as backbone

Primer name	Primer sequences (5' to 3')
F-*StuI*	XXXAGGCCTGGTTTTTTGGCTGTAGCAGCAGCAGNNNNNNNNNNNNNNNNNNNNCAGGAGATTCAGTTTGAAGCT
R-*EcoRI*	XXXGAATTCCACAGAACAGCCTAGCAGCAGGAANNNNNNNNNNNNNNNNNNNNAGAGAGGCAAAAGTGAAGTCC

XXX: additional nucleotides to ensure efficient restriction digestion of PCR products.

N_{21}: capitalized nucleotides in Oligo I designed by WMD3 "Oligo" algorithm.

N_{21}: capitalized nucleotides in Oligo IV designed by WMD3 "Oligo" algorithm.

> Rice pre-miR528-based pre-amiRNA sequences

(The restriction sites of *Stu*I and *Eco*RI are unlined, and the modified sites are in bold. amiRNA and amiRNA* highlighted in magenta and blue, respectively)

CAGCAGCAGCCACAGCAAAATTTGGTTTGGGATAGGTAGGTGTTATGTTAGGCCT
GGTTTTTTGGCTGTAGCAGCAGTCCATAGGTGCCATCCGGGAGCAGGAGATT
CAGTTTGAAGCTGGACTTCACTTTTGCCTCTCTCTCCCCGATCGCACCTATGGATT
CCTGCTGCTAGGCTGTTCTGTGGAATTCTGCAGAGTTTATATTATGGGTTTAATCG
TCCATGGCATCAGCATCAGCAGCC