

## 1 Supplemental Table S2 :Primers used in plasmid construction and other experiments in this study

Primer Name	Primer Sequence(5'—3')	Purpose
Poly(T) adapter	GCGAGCACAGAATTAATACGACTCACTATAGGTTTTTTTTTTTTTVN	For miRNAs RT
RT-q-PCR-miR-R	GCGAGCACAGAATTAATACGAC	Universal Reverse primer for RT-qPCR analysis for nta-miRNAs
nta-miRX17-F <sup>a</sup>	<u>CCCCACTTGTGGGATTATACTGGG</u>	Relative RT-qPCR analysis ofnta-miRX17
nta-miRX27-F <sup>a</sup>	<u>TATTTTTGGAGAGTTCGAGCA</u>	Relative RT-qPCR analysis ofnta-miRX27
nta-miRX20-F <sup>a</sup>	<u>CGTTGAAGTGGCAAGGATGAC</u>	Relative RT-qPCR analysis ofnta-miRX20
nta-miRX19-F <sup>a</sup>	<u>CGGATCTCTTGGCGGAAAGAC</u>	Relative RT-qPCR analysis ofnta-miRX19
M-5S RNA-F	TAAGGTAGCGGCGAGACGAGC	Relative RT-qPCR analysis ofmitochondrial 5S RNA
NtGAPDH-q-F	GCAGTGAACGACCCATTTATCTC	Relative RT-qPCR analysis of NtGAPDH
NtGAPDH-q-R	AACCTTCTTGGCACCACCCT	Relative RT-qPCR analysis of NtGAPDH
QPT1-q-F	CTTAAGGGACTACTTTGAACTTATCC	Relative RT-qPCR analysis of QPT1
QPT1-q-R	CTAAAGAAACCTTGGTGCTGTAATTG	Relative RT-qPCR analysis of QPT1
QPT2-q-F	CCTTGAAGTTGGAAGGCGTAC	Relative RT-qPCR analysis of QPT2
QPT2-q-R	CATAAGGTTGGAAGAGCCATCTG	Relative qRT-PCR analysis of QPT2
CYP82E4-q-F	CCACCGAAAATCCCCGGAGG	Relative RT-qPCR analysis of CYP82E4
CYP82E4-q-R	GGCGTCATTGTAGAGAAACAGTC	Relative RT-qPCR analysis of CYP82E4
NAC_148-q-F	ACACGTTTATTCTAGAACCCGCC	Relative RT-qPCR analysis of NAC_148
NAC_148-q-R	GCAATTCACCGCTGCCATTC	Relative RT-qPCR analysis of NAC_148
eTMX27-q-F	ATAGAAGCCGTTGGGGTAGTGAAC	Relative RT-qPCR analysis of eTMX27
eTMX27-q-R	ACTCATATCCTCGGGCGAACATC	Relative RT-qPCR analysis of eTMX27
eTMX27-Full-F <sup>b</sup>	CGGGATCCGTCACGTGTTCTCGACTTTTC	pCHF3-35S-nta-eTMX27, for transgenic over-expression of nta-eTMX27
eTMX27-Full-R <sup>b</sup>	GCGTCGACCAATACACTCATAGACATTATAC	pCHF3-35S-nta-eTMX27, for transgenic over-expression of nta-eTMX27
eTMX27-A-F <sup>b</sup>	<u>TCCGAGCTCGAAGCCGTTGGGGTAGTGAAC</u>	pCHF3-35S-ds-nta-eTMX27, for transgenic down-regulation of nta-eTMX27
eTMX27-intron-A-R	ATCAGACTTACAACGTCGTGTGTGTCATTTGACTG	pCHF3-35S-ds-nta-eTMX27, for transgenic down-regulation of nta-eTMX27
eTMX27-intron-B-F	CAGTCAAATGACACACACGACGTTGTAAGTCTGAT	pCHF3-35S-ds-nta-eTMX27, for transgenic down-regulation of nta-eTMX27
Intron-B-R	GGATCCGCTCTATCTGCTGGGTCCAAATC	pCHF3-35S-ds-nta-eTMX27, for transgenic down-regulation of nta-eTMX27
eTMX27-C-F <sup>b</sup>	<u>CGGGATCCCGTGTGTGTCATTTGACTG</u>	pCHF3-35S-ds-nta-eTMX27, for transgenic down-regulation of nta-eTMX27
eTMX27-C-R <sup>b</sup>	<u>GCGTCGACGAAGCCGTTGGGGTAGTGAAC</u>	pCHF3-35S-ds-nta-eTMX27, for transgenic down-regulation of nta-eTMX27
nta-miRX27-gene-F <sup>b</sup>	<u>CGGGATCCCAAGCTATGTTGCTCGGAC</u>	pCHF3-35S-nta-miRX27, for transgenic over-expression of nta-miRX27
nta-miRX27-gene-R <sup>b</sup>	GCGTCGACTGAGCTACGTTGCTCGAACTC	pCHF3-35S-nta-miRX27, for transgenic over-expression of nta-miRX27
STTMX27-F <sup>a,c</sup>	<u>CGGGATCC</u> , <u>TGCTCGAACTCCTATCCAAAAATAGTTGTTGTTGTTATGG</u>	pCHF3-35S-STTMX27, for transgenic destruction of nta-miRX27
STTMX27-R <sup>a,c</sup>	<u>GCGTCGAC</u> , <u>TATTTTTGGATAGGAGTTCGAGCAATTCTTCTTTAGACCA</u>	pCHF3-35S-STTMX27, for transgenic destruction of nta-miRX27
STTM-48 nt	GTTGTTGTTGTTATGGTCTAATTTAAATATGGTCTAAAGAAGAAGAAT	As STTMX27 template
QPT2-1R-New	CGCCATCATTTACATACTCCACTCCAC	5'RACE analysis for the first cleavage site of QPT2
QPT2-2R-New	CCAAGATGTAAGCAGGGTGTG	5'RACE analysis for the first cleavage site of QPT2
QPT-3R	CTTCCAACCTCAAGGGCGAGC	5'RACE analysis for the second cleavage site of QPT2
QPT-4R	GCTCATGCTCGTTTTGTACGCC	5'RACE analysis for the second cleavage site of QPT2

2 Supplemental Table S2.Primers used in plasmid construction and other experiments in this study.<sup>a</sup>, MiRNAequence is underlined; <sup>b</sup>,

3 Restriction site used for cloning is underlined; <sup>c</sup>, STTM mimic sequence is underlined.

