

Supporting Information

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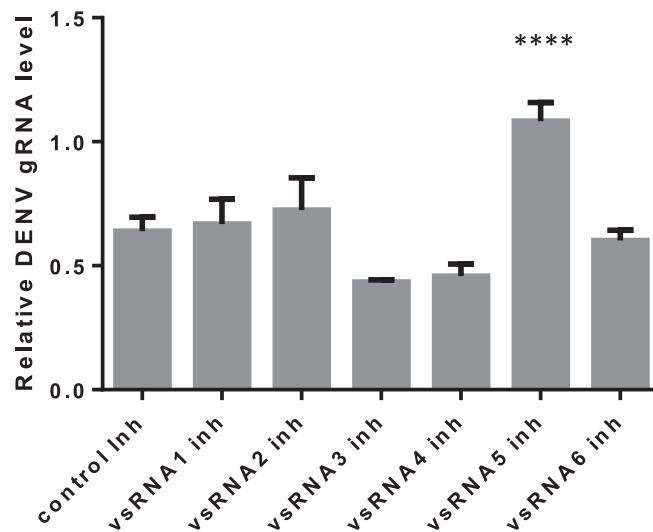


Fig. S1. Quantitative RT-PCR analysis to examine the levels of viral genomic RNA (gRNA) in *Aedes albopictus* RML-12 cells transfected with synthetic inhibitors of the six vsRNAs as shown in Fig. 1A followed by Dengue virus-2 infection at 7 d after infection. Data were normalized against RPS17. ***P < 0.0001, ANOVA.

Table S1. DENV-2 miRNA-like viral small RNAs (vsRNAs) identified in the 5' and 3'UTRs of the viral genome

DENV- vsRNAs	Genomic position	Sequence	PremiRNA (RNAfold)
vsRNA-1	14-35	CGUGGACCGACAAAGACAGAUU	AGUCUACGUGGACCGACAAGACAGAUUCUUUGAGGGAGC
			UAAGCUAACGU
vsRNA -2	10697-10723	AAUGGUGCUGUUGAAUCAACAGGUUCU	UCUCCUAGCAUCAUCCAGGCACAGAACGCCAGAAAUG
			GAAUGGUGCUGUUGAAUCAACAGGUUCU
vsRNA -3	10488-10507	GUAGUGGACAUAGCGGUUAGA	AUCUGGGAGGCCAACAAACCAUGGAAGCUGUACGCAUGGCUA
			GUGGACUAGCGGUUAGAGGAG
vsRNA -4	10526-10546	AAUCGCAGCACAAUAGGGGC	AUGGCCUAGUGGACUAGCGGUUAGAGGAGACCCCUCCCUACAA
			AUUCGCAGCAACAAUGGGGCC
vsRNA -5	10299-10321	CAGAAGUCAGGUCGGAUUAAGCC	ACAAGGCAGAAGUCAGGUCGGAUUAAGCCAUAGUACGGAAAAAA
			CUAUGCUCACCUGUGAGCCC
vsRNA -6	10582-10602	ACUAGAGGUUAGAGGAGACCC	AGGUGAGAUGAAGCUGUAGUCUCACUGGAAGGACUAGAGGUUA
			GAGGAGACCCCCCA

The vsRNA sequences were obtained from deep sequencing of DENV-infected *Aedes aegypti* mosquitoes. Potential sequences forming precursor stem loops (premiRNA) were predicted in RNAfold.

Table S2. Primers, small RNA mimics, and inhibitors used in this study

Oligos	Sequence
Control inhibitor	UCUACUCUUUCUAGGAGGUUGUGA
vsRNA-1 inhibitor	AAUCUGUCUUUGUCGGUCCACG
vsRNA-2 inhibitor	AGAACCGUGUGAUCAACAGCACCAUU
vsRNA-3 inhibitor	UCUAACCGCUAGUCCACUAC
vsRNA-4 inhibitor	GCCCCCAUUGUUGCUGCGAUU
vsRNA-5 inhibitor	GGCUUAAUCCGACCUGACUUCUG
vsRNA-6 inhibitor	ACUAGAGGUUAGAGGAGACCC
Control mimic	UUCUCCGAACGUUCACGUUU
	ACGUGACACGUUCGGAGAAUU
vsRNA-5 mimic	CAGAACGUACAGGUUCGGAUUAAGCC
	CUUAAUCCACCUUGACUUUCGUU
vsRNA-6 mimic	ACUAGAGGUUAGAGGAGACCC
	GUCUCUCUAAACCUCUAGUUU
vsRNA-5 pre R	GGCATTGTAATGGCCTGACTTCT
5' probe	GGCTTAATCCGACCTGACTCTG
3'TL probe	GGTAGCATAGTTTCCGTACTAT
vsRNA-2 probe	AGAACCTGTTGATTCAACAGCACCATT
vsRNA-5 qPCR F	CAGAACGTCAAGTCGGAT
vsRNA-5 qPCR R	CAGTGCAGGGTCCGAGGTTTTTTTGCTTA
5S rRNA F	CGCGTCAGAATGTGAAGTGC
5S rRNA R	GC GGCGCGTATAGTTGAATG
NS1 RNAi F	TAATACGACTCACTATAGGGTCATAACACAAACGGCAGGAC
NS1 R	CATTCCATACCCAGCATCCAT
NS1 target 1	TCTAGACTGGCATCTAGGTAGGCTTGAGATGGACTTGTAGTTCTCGAAGGAACCGCGG
NS1 target 2	CCCGCGTTCTTCGAGAAATCAAAGTCATCTCAAGCTACCTAGATGCCAGTCTAGA
NS1 target 3	TCTAGACTGGCATCTAGGTAGGCTTGAGATGGACTCGAAGGAACCGCGG
NS1 target 4	CCCGCGTTCTTCGAGTCATCTCAAGCTACCTAGATGCCAGTCTAGA
NS1 pIZ F	GGACTAGTATGGATAGTGGTTGCGTTGAG
NS1 pIZ R	GGCCGCGCGGCTGTGACCAAGGAGTTGA
3'UTR RNAiF	AGAAGCCAAAACATCAACATGA
3'UTR R	AGAACCTGTTGATTCAACAGCACC
RNAi Dicer-1 F	CCCGGACCAAGTCCTAGTA
RNAi Dicer-1 R	CAACTCTTCGGCACGTAA
RNAi Dicer-2 F	GCATTGACGACGAAATCATCGTC
RNAi Dicer-2 R	ACCATGGCATCCGCCGGTGTCT
RNAi AGO2 F	ATGTAGACGCGTCCTCTGT
RNAi AGO2 R	ACAGTTCAAGCAGACGAACC
T7 promoter	TAATACGACTCACTATAGGG
RPS17 F	CACTCCCAGGTCCGTGGTAT
RPS17 R	GGACACTTCCGGCACGTAGT
DENV qPCR F	GTTGGTGGTGAATGAGGACTG
DENV qPCR R	CCATCCCGTACCAAGCATCCG