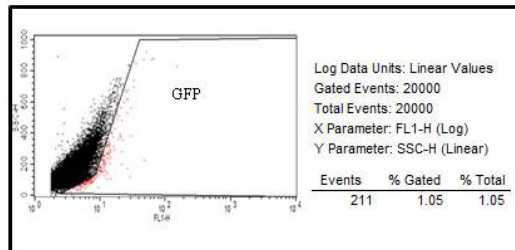


**Analysis of chikungunya virus proteins reveals that non-structural proteins nsP2 and nsP3 exhibit RNA interference (RNAi) suppressor activity**

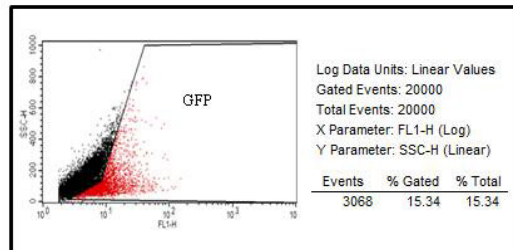
Kalika Mathur<sup>1</sup>, Abhishek Anand<sup>2</sup>, Sunil Kumar Dubey<sup>1</sup>, Neeti Sanan-Mishra<sup>2</sup>, Raj K Bhatnagar<sup>1\*</sup>, Sujatha Sunil<sup>1\*</sup>

## Supporting information

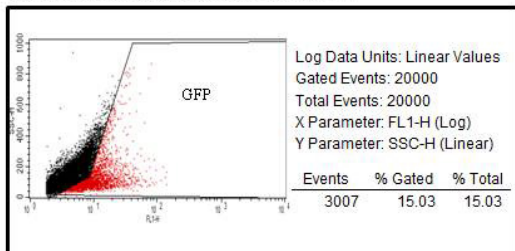
(a) Sf21 cell line



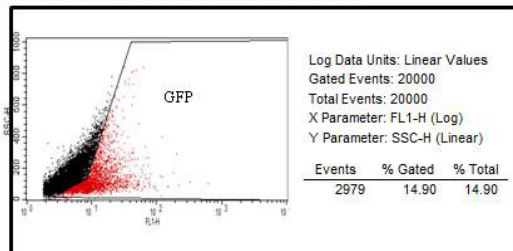
(b) Sf21 transfected with GFP plasmid



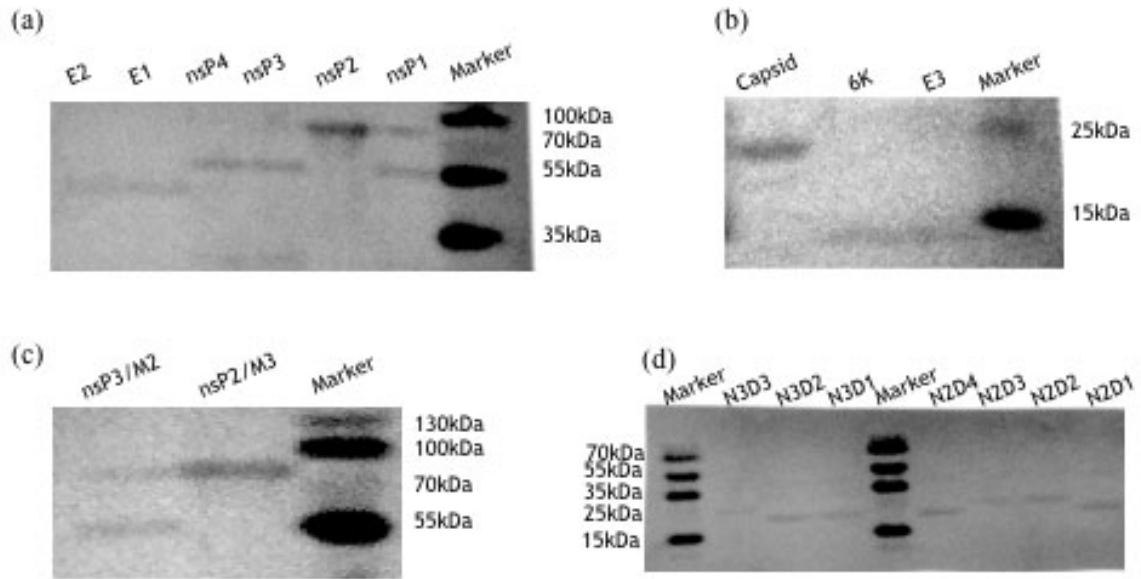
(c) Sf21 cotransfected with GFP and nsP2



(d) Sf21 co-transfected with GFP and nsP3



**Supplementary Figure S1.** Trans-activation assay of CHIKV VSRs. Sf21 cell line was co-transfected with GFP plasmid and VSR plasmids. FACS analysis was done after 72h.



**Supplementary Figure S2. Western blotting of CHIKV plasmid constructs.** Sf21 cell line was transfected with CHIKV plasmids. Cells were harvested after 72h and western blotting was done using anti-His primary antibody and AP conjugated secondary antibody.

**Supplementary Table 1. Primers used in the study**

S.No.	Plasmid	Primer Sequence
	<b>pIB/V5-His TOPO (Transfection in Sf21 &amp; Aag2)</b>	
1	nsP1	FP: GTAATGGATCCTGTGTACGTGG RP: TGCACCCGCTCTGTCCT
2	nsP2	FP: GTAATGGGAATAATAGAGACTCCGAGA RP: TCCTGCTCGGGTGGCCTG
3	nsP3	FP: GTAATGGGATGTGCACCGTCGTACCGG RP: TTACTCGTCGTCCGTGTCTG
4	nsP4	FP: GTAATGGGACGACTAGACAGGGCAGGTG RP: AGGACCGCCGTACAAAGTTA
5	E1	FP: GTAATGGCGTACGAACACGTAACAG RP: TTAGTGCTGTGTAACGACAC
6	E2	FP:GTAATGGGAAGCACCAAGGACAACCTCAAT RP: TTTAGCTGTCTGATGCAGC
7	E3	FP: GTAATGGGATGGAGTCTTGCCATCCCAGT RP: GCGTCGCTGGCGGTGG
8	Capsid	FP: GTAATGGAGTTCATCCCAACCC RP: CTCTTCGGCTCCCTCAG

9	6K	FP: GTAATGGCGGCCACATACCAAGAG RP: GCTCACAGTGTGGGCAC
10	N2D1	FP: GTAATGGGAATAATAGAGACTCCGAGA RP: GACTGCAATTTGTATGGGCAG
11	N2D2	FP: ATCGGATCCGTAATGGGAATAGGAGTCTTCG RP: TGTCTCCATACCAGTTACCTTC
12	N2D3	FP: ATCGGATCCGTAATGGGACTCTCCGGTGACC RP: CTTGTAAACCAGCCATTCCATTC
13	N2D4	FP: ATCGGATCCGTAATGGGAATAAACGGCCACCA RP: TCCTGCTCGGGTGGCCTG
14	N3D1	FP: GTAATGGGATGTGCACCGTCGTACCGG RP: TTGGGTCCGCATCTGTAT
15	N3D2	FP: ATCGGATCCGTAATGGTGGAGCTGCTGG RP: GTATTCCCTGGACTTACGCG
16	N3D3	FP: ATCGGATCCGTAATGGGAAGACCTTCCAGGAGT RP: TTAATCGTCCGTGTCTG
	<b>pcDNA 3.1(+)</b> (Transfection in HEK293T)	
17	nsP1	FP: ATCAAGCTTGTAATGGATCCTGTGTACGTGG RP: ATCGAATTCATTTGCACCCGCTCTGTCCT
18	nsP2	FP: ATCGGATCCGTAATGGGAATAATAGAGACTCCGAGA RP: ATCCTCGAGATTTCTGCTCGGGTGGC
19	nsP3	FP: ATCGGATCCGTAATGGGATGTGCACCGTCGTA RP: ATCGAATTCATTTAACTCGTCCGTGTCTG
20	nsP4	FP: ATCGGATCCGTAATGGGACGACTAGACAGGG RP: ATCGAATTCATTAGGACCCGCTACAAAGTTA
21	E1	FP: ATCGGATCCGTAATGGCGTACGAACACGTAACAG RP: ATCGAATTCATTGTGCCTGCTGAACGACAC
22	E2	FP: ATCGGATCCGTAATGGGAAGCACCAAGGACA RP: ATCGAATTCATTTTAGCTGTTCTGATGCAGC
23	E3	FP: ATCGGATCCGTAATGGGATGGAGTCTTGCCATCCCAGT RP: ATCGAATTCATTGCGTCCGTGGCGGTG
24	Capsid	FP: ATCGGATCCGTAATGGAGTTCATCCCAACCCA RP: ATCGAATTCATTCTCTTCGGCTCCCTCAG
25	6K	FP: ATCGGATCCGTAATGGCGGCCACATACCAA RP: ATCGAATTCATTGCTCACAGTGTGGGCAC
26	<b>shRNA oligonucleotide</b>	GGT TAT GTA CAG GAA CGC ATT CAA GAG ATG CGT TCC TGT ACA TAA CCT T