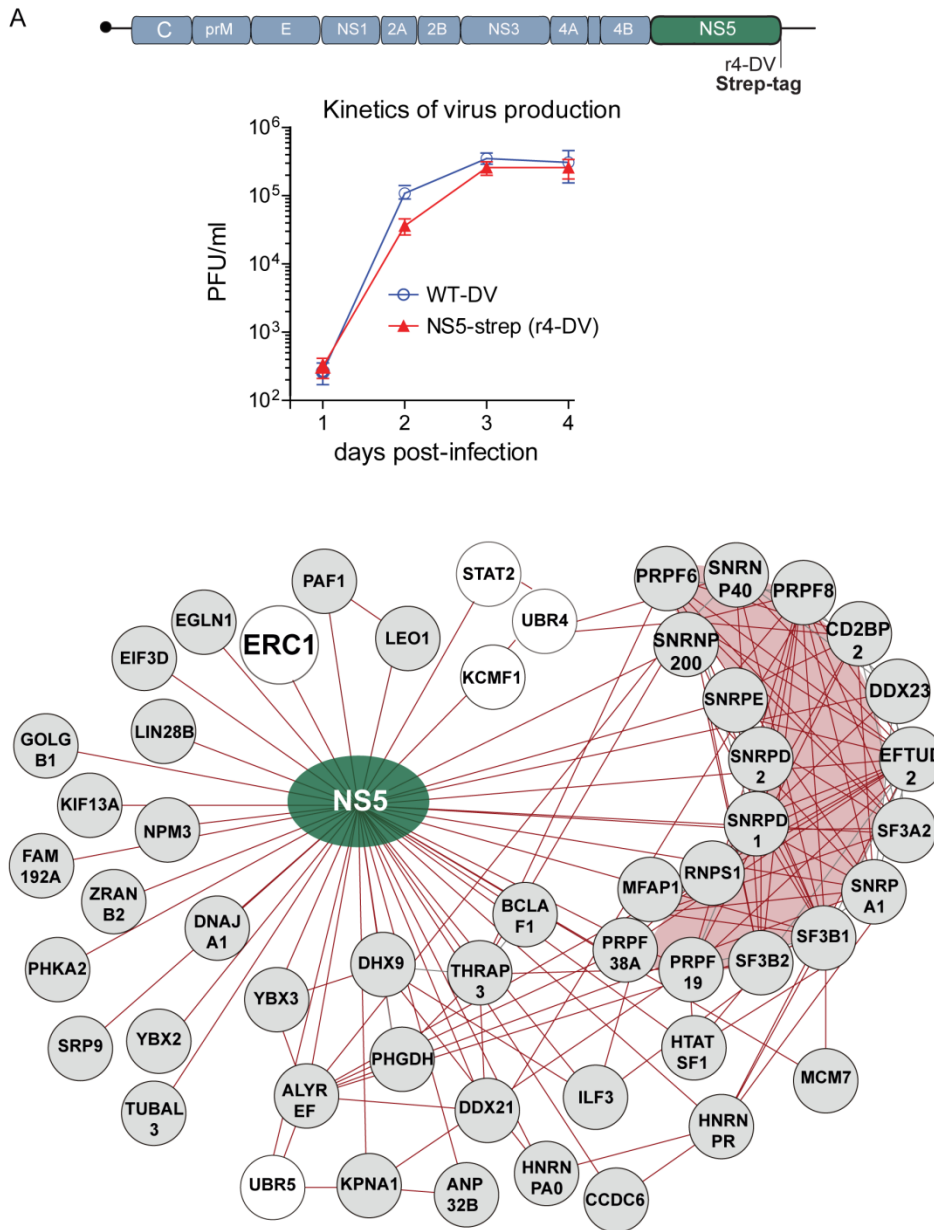


1 Supplemental information

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S1



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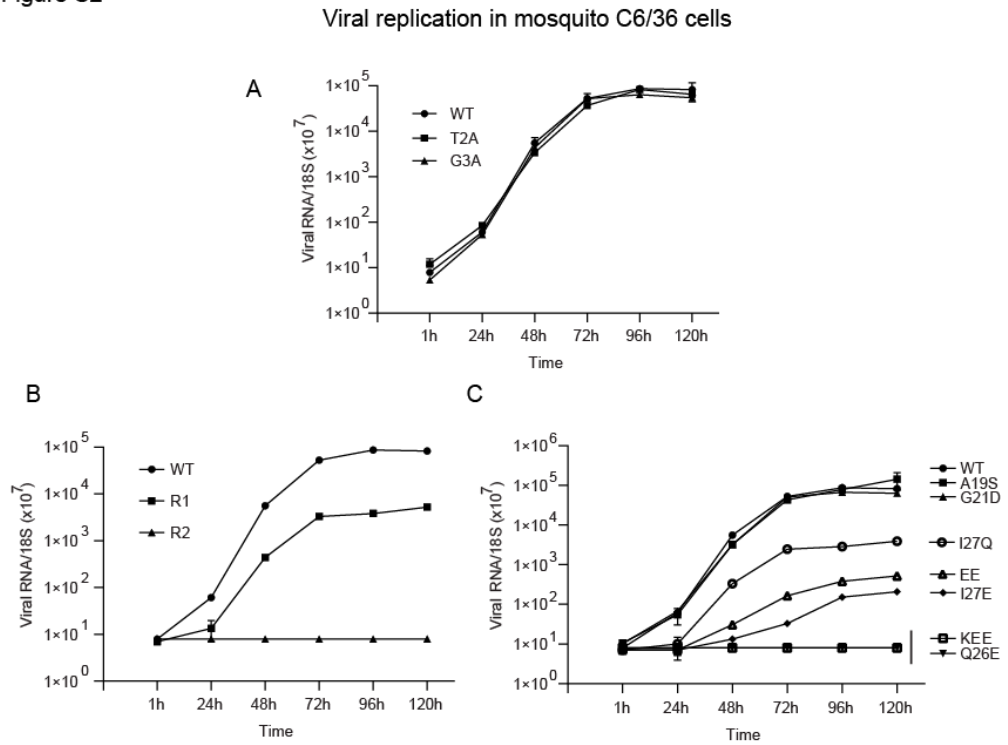
4 **Figure S1. NS5 host protein interactions during DENV infection**

5 (A) Representation of a recombinant DENV2 with a Strep-tag fused to NS5 (r4-DV) and

6 replication kinetics comparing it with the WT DENV2. (B) DENV2 NS5-host proteins interaction

7 network.

Figure S2



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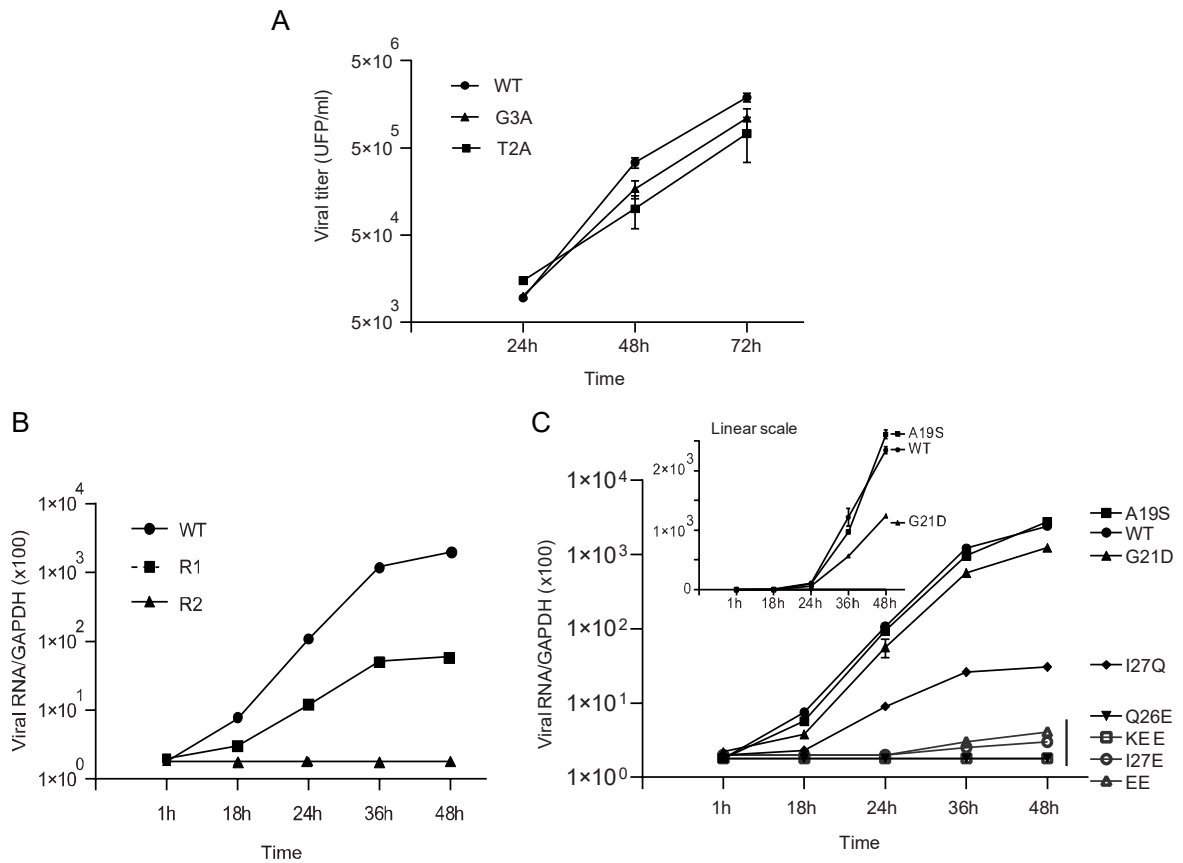
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10 **Figure S2. Viral replication in mosquito cell line C6/36**

11 (A) Viral replication of DENV2 WT, T2A and G3A viruses as a function of time (MOI:1).
12 Intracellular viral RNA levels relative to 18S measured by RT qPCR. (B) Viral replication of
13 DENV2 WT, chimeric R1 and R2 viruses is shown. RT qPCR of intracellular viral RNA relative to
14 18S (MOI:1). (C) Replication levels of viruses carrying one or a combination of point mutations in
15 R1 region is shown as a function of time (MOI: 1).

Figure S3

Viral replication in human A549 cells



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18 **Figure S3. Viral replication in human cell line A549**

19 (A) Viral replication of DENV2 WT, T2A and G3A viruses as a function of time in A549 cells
 20 (MOI:0.01). Plaque assay of infectious viral particles in the supernatant of infected A549 cells
 21 (PFU: plaque forming units). (B) Viral replication DENV2 WT, chimeric R1 and R2 viruses relative
 22 to GAPDH measured by RT qPCR (MOI:1). (C) Viral replication of viruses carrying one or a
 23 combination of point mutations in R1 region is shown as a function of time (MOI:1). RT qPCR of
 24 intracellular viral ARN relative to GAPDH.

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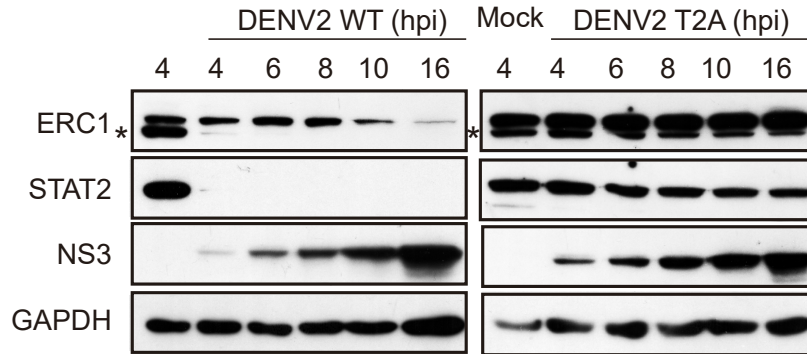
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Figure S4

Kinetics of STAT2 and ERC1 degradation as a function of time after DENV WT and T2A infection



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31 **Figure S4. Kinetics of STAT2 and ERC1 degradation upon infection with DENV2 WT and**
32 **T2A viruses**

33 (A) Levels of STAT2 and ERC1 proteins as a function of time in cells infected with DENV2 WT or
34 T2A. A549 cells were infected with an MOI of 10 during 4, 6, 8, 10 or 12 hours and lysed for
35 analyses. ERC1, STAT2, viral NS3 to assessed infection and GAPDH control are shown on the
36 left. STAT2 protein was blot before ERC1 and therefore, STAT2 can still be detected (indicated
37 with * below ERC1)

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40 **Table 1. Primers used to introduce mutations in the DENV2 infectious clone**

Viral mutant	Name	Sequence
Forward	AVG1320	CGGAGACCCTGGAGACATTG
Reverse	AVG 1323	CTGCGGTGTCATCGGCATAC
T2A	AVG2363 AVG2364	CGTCTCTCCTATGTTGCCAGCTCCCCTTCTTGT GGAGCTGGCAACATAGGAGAGACGCTTGGAGA
G3A	AVG2365 AVG2366	CGTCTCTCCTATGTTGCCAGTTCCCCTTCTTGT GGAAGTGCACATAGGAGAGACGCTTGGAGA
R1	AVG2363 AVG2364	CGTCTCTCCTATGTTGCCAGCTCCCCTTCTTGT GGAGCTGGCAACATAGGAGAGACGCTTGGAGA
R2	AVG2385 AVG2382	TTTAGACCCATCTTTCAGGGCAGATTTTGCTAAGGTTCTATCCACTTCC TCTGCCCTGAAAGATGGGTCTAAAGACCATCACGCTGTGTCTG
A19S	AVG 2447 AVG 2446	TAATGAGTTTAGCTGTCTTTTCCATTCTCTCCAAGCGTCTCT AGACAGCTAAACTCATTAGGAAAAAGTGAATTCCAGATCTACAAGAAAAG
G21D	AVG 2465 AVG 2464	AATTCACTTTTGTCCAATGCGTTCAATCGG TGAACGCATTGGACAAAAGTGAATTCC
Q26E	AVG 2467 AVG 2466	CACTTTTCTTGTAGATTTTGAATTCACCTTTTTTCCC GAAAAAGTGAATTCGAAATCTACAAGAAAAGTGG
I27E	AVG 2469 AVG 2468	CCACTTTTCTTGTACTCCTGGAATTCACCTTTTTTC GTGAATTCAGGAGTACAAGAAAAGTGAATC
I27Q	AVG 2471 AVG 2470	CCACTTTTCTTGTACTGCTGGAATTCACCTTTTTTC GTGAATTCAGCAGTACAAGAAAAGTGAATC
KEE	AVG 2473 AVG 2472	GGATTCCACTTTTTCTTGTACTCTTGAATTCCTTTTTTCCCAATGCG CGCATTGGGAAAAAAGAATTCGAAGAGTACAAGAAAAGTGAATCC
EE	AVG 2475 AVG 2474	GGATTCCACTTTTTCTTGTACTCTTGAATTCACCTTTTTTCC GAAAAAGTGAATTCGAAGAGTACAAGAAAAGTGAATCC

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43 **Table 2. Primers used to obtain viral protein expression plasmids**

Name	Sequence
AVG2 375	CCCTCGAGGGACCTGGAGCCACGAACTTCTCTCTGTTAAAGCAAGCAGGAGATGTTGAAGAAAACCCCG GGCCTGTGAGCAAGGGCGAGGAGCT
AVG2 376	ATGGGCCCTTGTACAGCTCGTCCATGC
AVG2 375	CCCTCGAGGGACCTGGAGCCACGAACTTCTCTCTGTTAAAGCAAGCAGGAGATGTTGAAGAAAACCCCG GGCCTGTGAGCAAGGGCGAGGAGCT
AVG2 377	ATCTCGAGTTACTTGTACAGCTCGTCCATGC
AVG2 269	CCGGTACCATGGGAACTGGGACCACAGGAGAGACTGG
AVG2 270	ATCTCGAGCGTTCCTGCCCAAGATCTACGTCCTTC
AVG2 380	CGCAAATGGGCGGTAGGCGTG
AVG2 384	CTCTTCAAACCTTTTTCTGTCTAATGAGTTAGCTGTCTTTCCATTTCTCTCCAAGCGTCTCT
AVG2 381	AGACAGCTAAACTCATTAGACAGAAAAGAGTTTGAAGAGTACAAGAAAAGTGAATCCAGGAAGTGG
AVG2 387	CTCGAGCCACAGAACTCCTGCTTCTTCTCTTCTC
AVG2 385	TTTAGACCCATCTTTCAGGGCAGATTTTGCTAAGGTTCTATCCACTTCC
AVG2 382	TCTGCCCTGAAAGATGGGTCTAAAGACCATCACGCTGTGTGCG
AVG2 386	TTCAGGTTTTGAAGACAACCAATTTTCTACTAAGTTAAGGACTC
AVG2 383	TCTTCAAAACCTGAATTTTGCATAAAGGTTCTCAACCC

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Name	Sequence
Aedes albopictus 18S Forward qPCR	GTGCATGGCCGTTCTTAGTTG
Aedes albopictus 18S Reverse qPCR	CGAACCGTCGGTATCAAACATC
DENV Forward qPCR	ACAAGTCGAACAACCTGGTCCAT
DENV Reverse qPCR	GCCGCACCATTGGTCTTCTC
human ERC1 Forward qPCR	GGAATCAGCCAGGACCAATGCT
human ERC1 Reverse qPCR	CCTTTTCTGCCAGAGACTGCTG
human GAPDH Forward qPCR	ACAACCTTTGGTATCGTGGAAGG
human GAPDH Reverse qPCR	TATTTGGCAGGTTTTTCTAGACG
human IFN β Forward qPCR	TCTGGCACAACAGGTAGTAGGC
human IFN β Reverse qPCR	GAGAAGCACAACAGGAGAGCAA
human IL6 Forward qPCR	AGAGGCACTGGCAGAAAACAAC
human IL6 Reverse qPCR	AGGCAAGTCTCCTCATTGAATCC
human TNF α Forward qPCR	TCAGCTTGAGGGTTTGCTAC
human TNF α Reverse qPCR	TGCACTTTGGAGTGATCGG
human UBR4 Forward qPCR	GGTGTTCAGAGGCTAGTGATC
human UBR4 Reverse qPCR	CCAAGTCTTCTGCGGTTCTT