Electronic Supplementary Material

DC-SIGN promotes Japanese encephalitis virus transmission from dendritic cells to T cells via virological synapses

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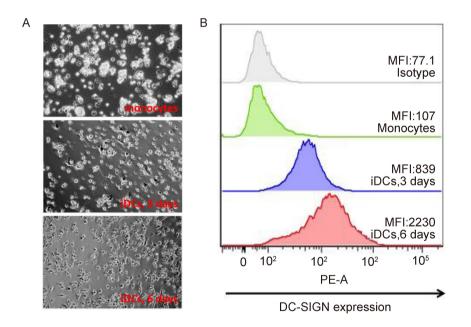
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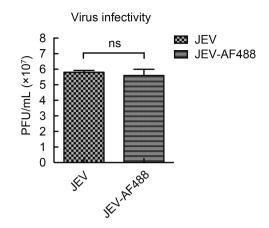
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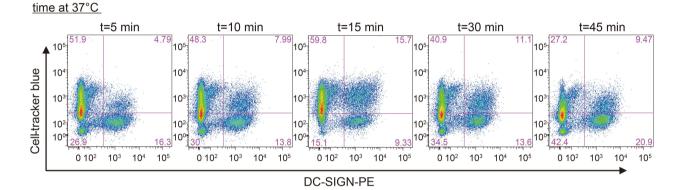
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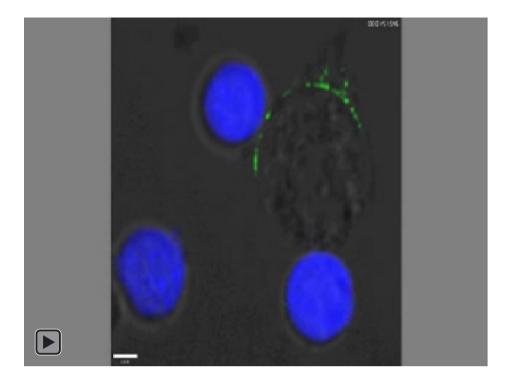
Material S1. DCs and DC-SIGN expression. (A) DC morphology. (B) The surface expression of DC-SIGN on DC.



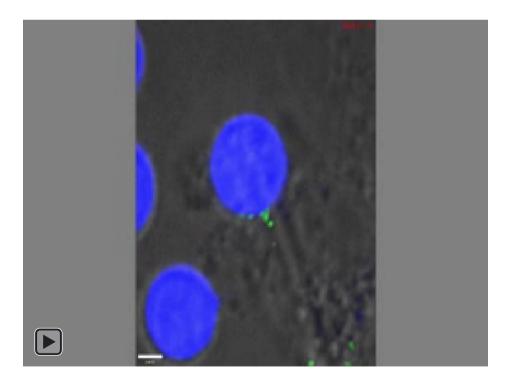
Material S2. Infectivity of JEV and JEV-AF488. JEV or JEV-AF488 (MOI = 0.1) were used to infect Raji-DC-SIGN cells for 3 days. The supernatants were collected and titered in BHK-21 cells. Data represent mean \pm SD of three independent experiments. Means were compared with the Student's *t*-test. ns, Non-significant.



Material S3. Formation of DC-T clusters. DCs were pulsed with JEV-AF488 (MOI = 10) on ice for 1 h, washed extensively to remove unbound viruses and then incubated with CellTracker Blue-labeled T cells for the indicated times before fixation and staining with phycoerythrin (PE)-conjugated DC-SIGN (DC-SIGN-PE). CD-T clusters were first gated on JEV-AF488⁺ populations followed by analysis with CellTracker Blue⁺ PE⁺ cells. Results of a representative experiment (n = 3) are shown.



Material S4. The VS between DCs and T cells formed in a few minutes (Download to play the AVI movie).



Material S5. JEV viral particles moved to the VS and were then directionally transferred to T cells (Download to play the AVI movie).