

Site-Specific Labeling of Baculovirus in an Integrated Microfluidic Device

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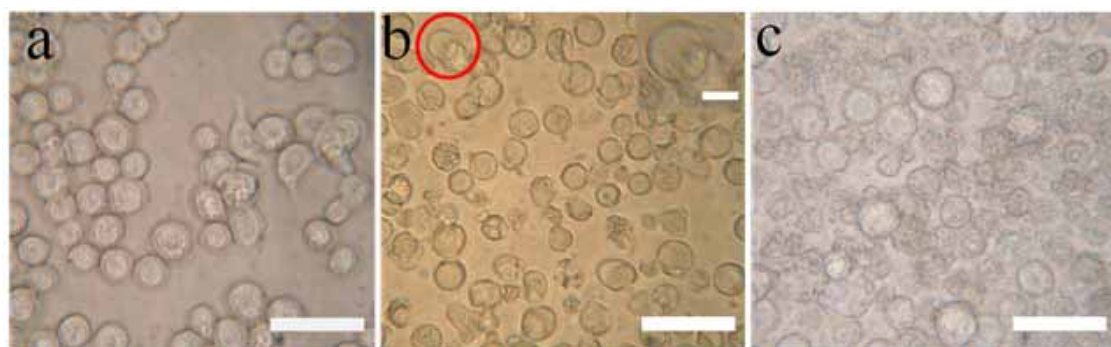


Fig. S1 (a) The bright field image of Sf9 cells 2 days after transfection. (b) The bright field image of Sf9 cells 3~4 days after transfection. Red circle indicated vesicle were appeared to cells, it signed of viral budding. The insert at the top right corner is the magnification of the cell in the red circle. The scale bar of the insert is 10 μm . (c) The bright field image of Sf9 cells 7 days after transfection. The scale bars are 50 μm .

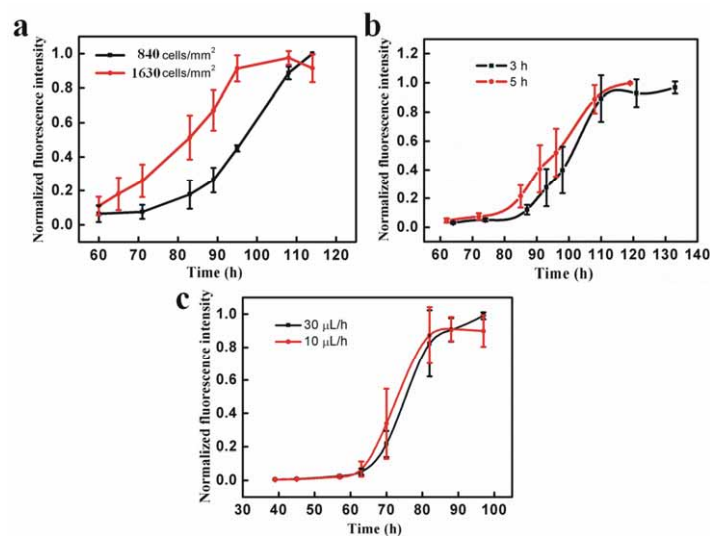


Fig. S2 (a) The relative average fluorescence intensity at different cell densities. (b) The relative average fluorescence intensity at different incubation times between the cationic lipid-DNA complex and Sf9 cells. (c) The relative average fluorescence intensity at different flow velocities.

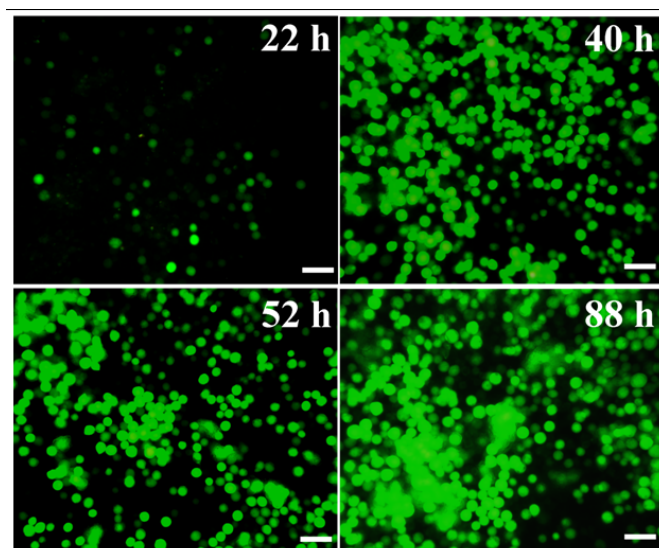


Fig. S3 The fluorescence images of Sf9 cells infected with the recombinant baculovirus at different times. The scale bars are 50 μm .

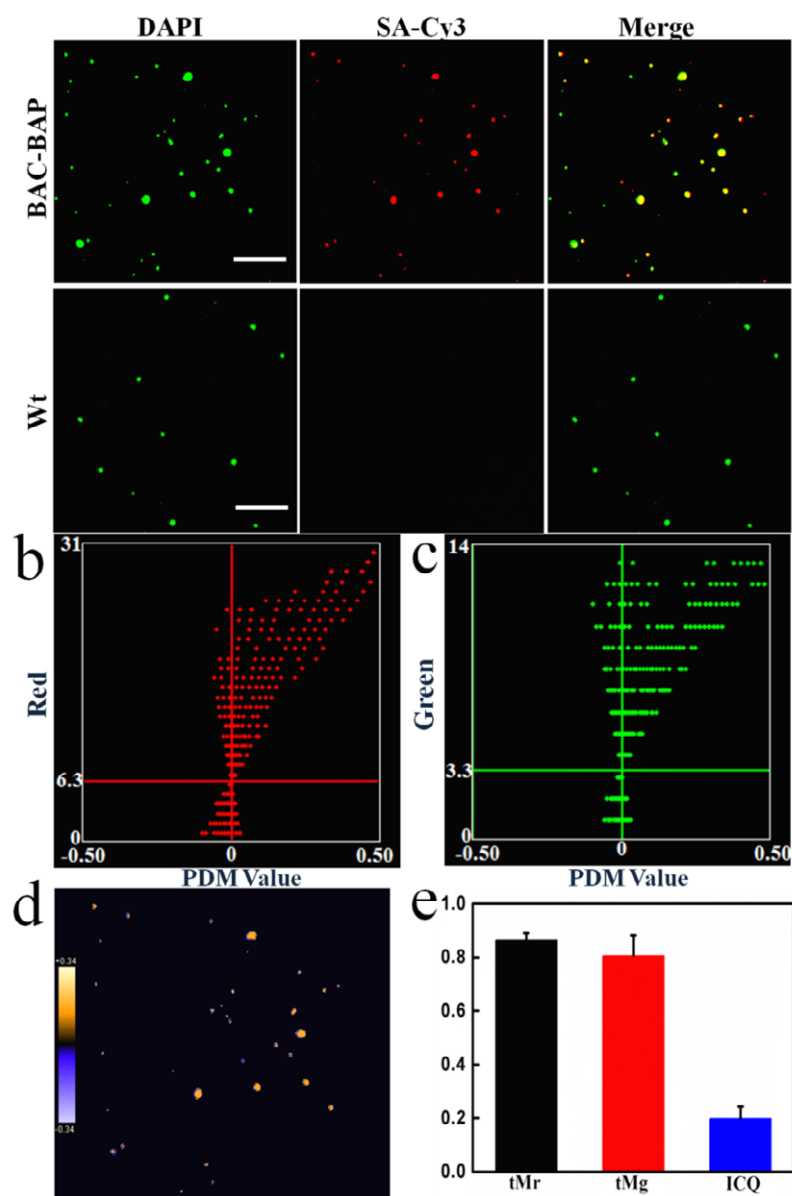


Fig. S4 Colocalization analysis of viruses. (a) The fluorescence images of the BAC-BAP and Wt viruses labeled with Cy3-SA (red) and DAPI (the green signals indicated the fluorescence of DAPI after pseudocolor processing). The scale bars are 10 μm . (b), (c) The intensity correlation plots of red and green signals of BAC-BAP. (d) The PDM image for visualizing the extent of colocalization. (e) Histograms of tMr, tMg and ICQ values.

Measurement of virus titer

Each virus stock to be titered was serially diluted in 10-fold series and added to the exponential growth phase Sf9 cells in wells of a 96-well plate. 1.5 h later, the viral suspension was replaced by the 2% FBS Grace's insect medium. The fluorescence of EGFP of cells was examined for signs of infection four days post infection. The tissue culture infective dose (TCID₅₀) of recombinant baculovirus was calculated using Reed-Muench method.