

Supplemental Movie 1: Time-lapse video of differentiated SH-SY5Y neuronal cells during high MOI HSV-1 infection.

Images were taken every hour for twenty-four hours in both phase and fluorescent channels on a Nikon Ti Eclipse inverted epifluorescence microscope and played back at 25 frames per second. SH-SY5Y neuronal cells were infected at a MOI of 10 with HSV-1 F_{RED}(HSV-1 GS2822), which encodes mRFP1 fused to the N terminus of VP26 (67). Movie was created in Adobe Premier Pro CC and a shadow/highlight effect was applied. Brightfield acquisition: 6 ms, gain 1; Cy3 acquisition: 600 ms, gain 3.

Supplemental Movie 2: Time-lapse video of differentiated SH-SY5Y neuronal cells during low MOI infection with two distinct strains of HSV-1.

Differentiated SH-SY5Y neuronal cells were infected with HSV-1 KOS or HSV-1 McKrae at a MOI of 0.01 in the presence of 0.1% human serum. Phase images were acquired every hour from 24 hpi-72 hpi on a Nikon Ti Eclipse inverted epifluorescence microscope and played back at 10 frames per second. Movie was created in Adobe Premier Pro CC and a shadow/highlight effect was applied. Bright field acquisition: 3 ms, gain 1.