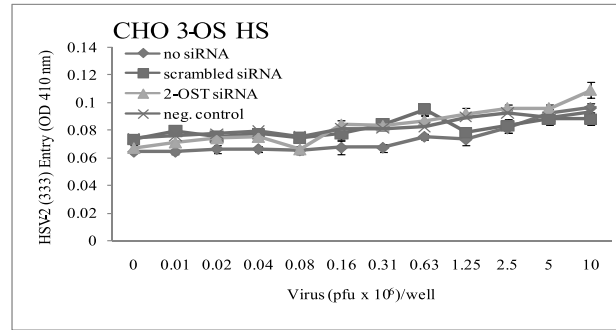
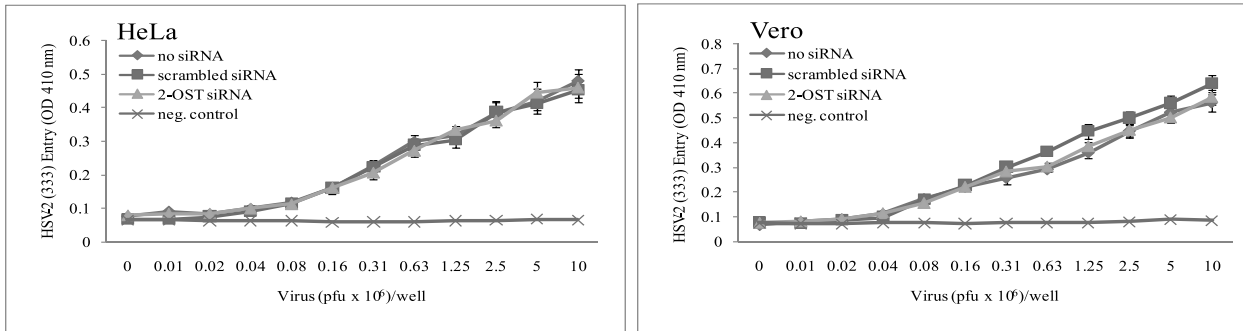


Supplemental Figure Legends

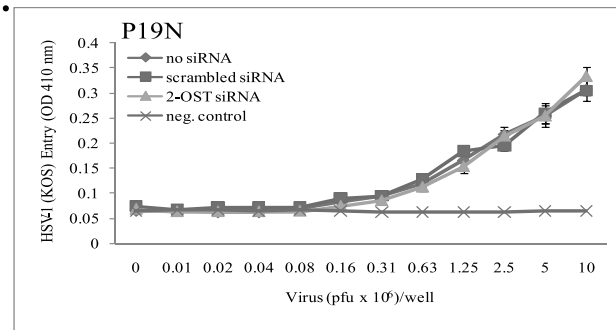
Supplemental Fig. 1. Effect of 2-OST and 3-OS HS downregulation on entry is specific to HSV-1 entry in cells expressing 3-OSTs. A.) HSV-2 entry was analyzed in HeLa, Vero, and CHO-K1 cells expressing 3-OST-3B. Cells were mock treated (no siRNA) or transfected with scrambled siRNA or 2-OST siRNA. Cells were replated in a 96-well culture dishes and inoculated with β -galactosidase-expressing recombinant HSV-2 (333) gJ- for 6 h. The soluble substrate ONPG was added, and enzymatic activity was measured with a microplate reader at 410 nm. B.) An HSV-1 entry assay was performed as previously described in P19N cells. About 48 h after siRNA transfection, P19N cells were infected with HSV-1 (KOS) gL86 for 6 h. ONPG was added, and enzymatic activity was measured with a microplate reader at 410 nm. Entry was compared in P19N cells that were mock treated (no siRNA), treated with scrambled siRNA, or treated with 2-OST siRNA.

Supplemental Fig. 2. Effect of 2-OST and 3-OS HS downregulation on cell-cell fusion is specific to HSV-1 mediated fusion cells expressing 3-OST isoforms. A.) Target cells for Vero, HeLa, and CHO-K1 cells expressing 3-OST-3B were mock treated (no siRNA), treated with scrambled siRNA, or treated with 2-OST siRNA. About 48 h after siRNA transfection, target cells expressing nectin-1 were mixed together in a 1:1 ratio with effector cells expressing the HSV-2 glycoproteins required for HSV-2 cell-cell fusion (gB-2, gD-2, gH-2, gL-2). Luciferase activity was measured after 24 h. B.) An HSV-1 mediated cell-cell fusion was performed as previously described in P19N cells. About 48 h after siRNA transfection, target and effector cells were mixed in a 1:1 ratio, and luciferase activity was measured after 24 h. Fusion was compared in P19N cells that were mock treated (no siRNA), treated with scrambled siRNA, or treated with 2-OST siRNA.

A.

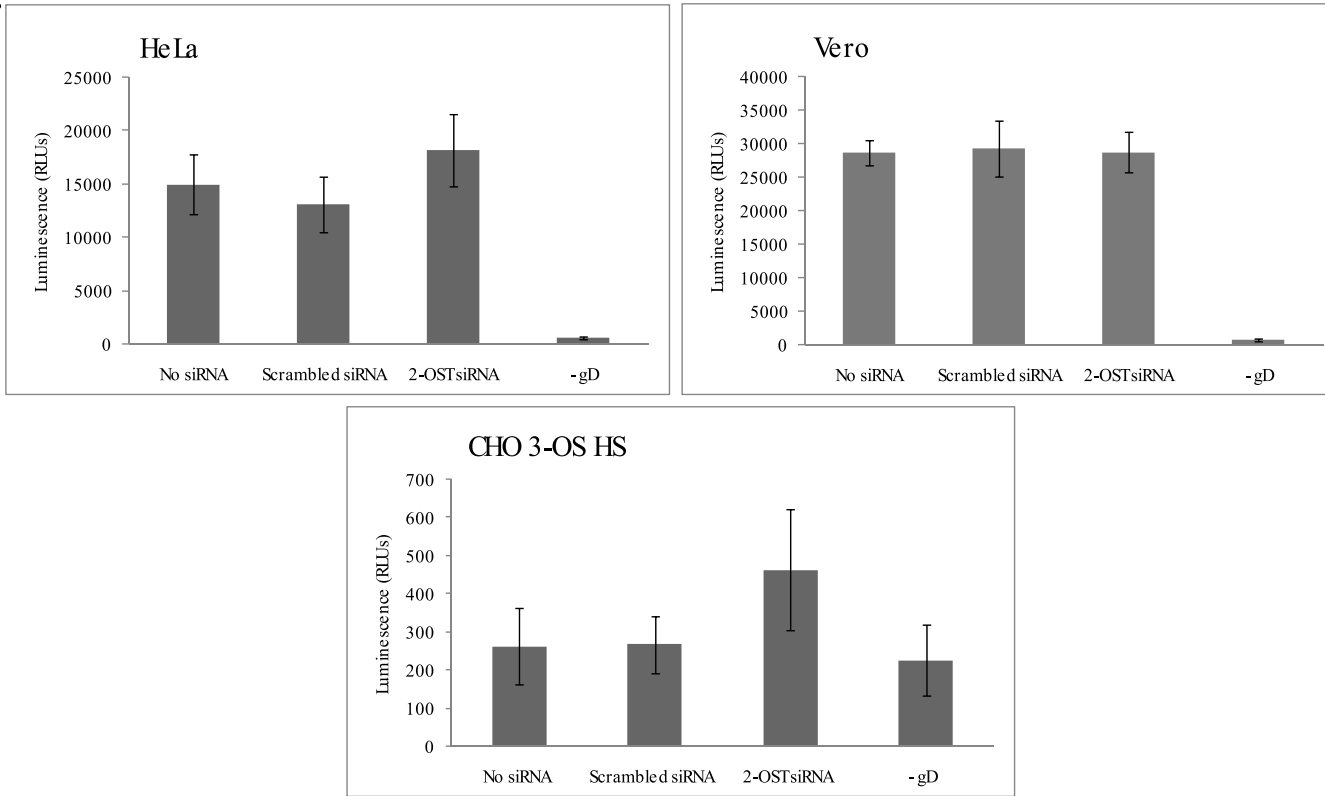


B.

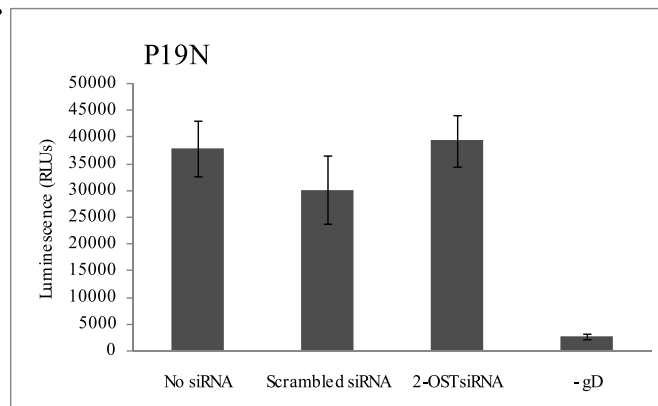


Supplemental Figure 1.

A.



B.



Supplemental Figure 2.