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Supporting Information

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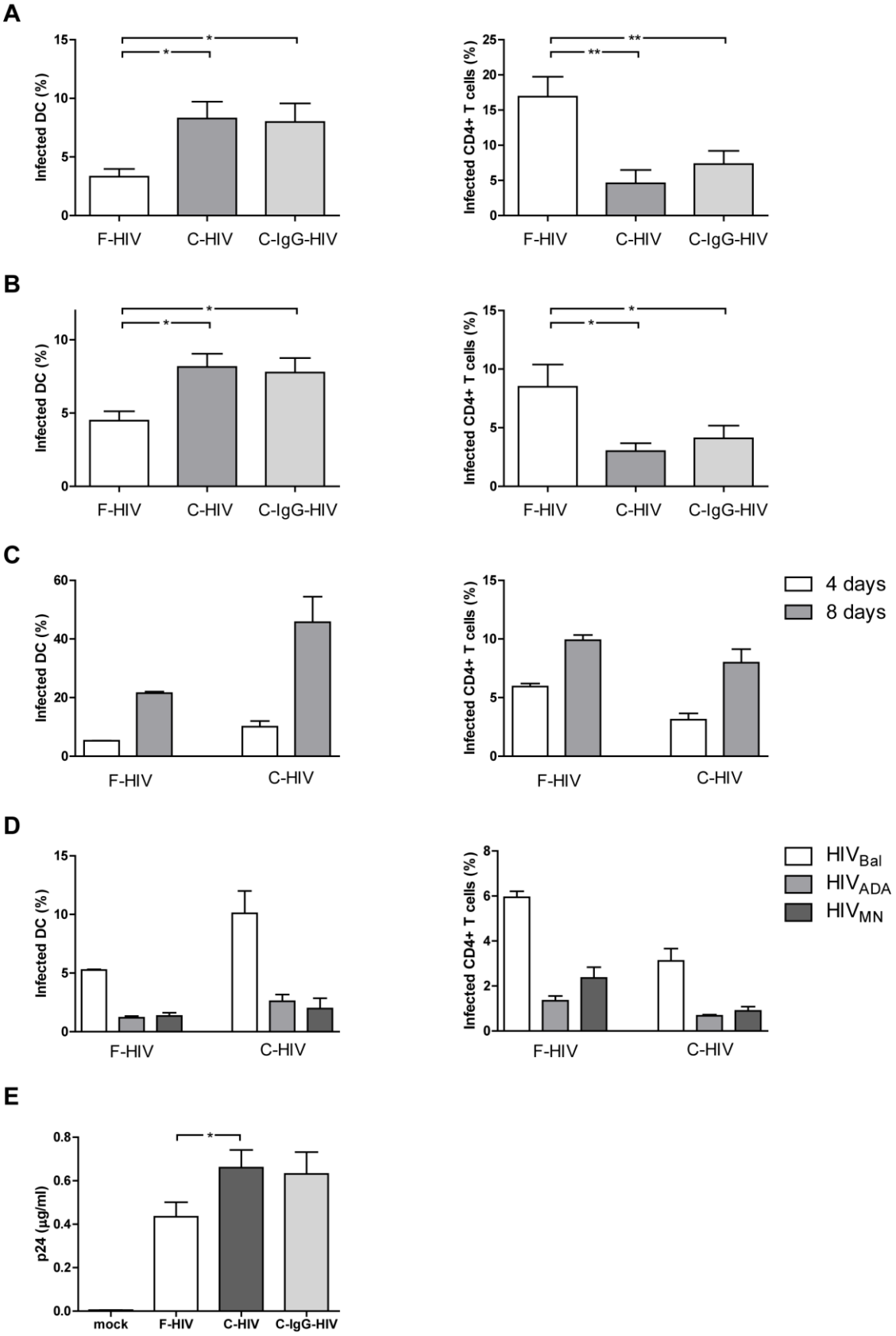
Blocking of integrins inhibits HIV-1 infection of human cervical mucosa immune cells with free and complement-opsonized virions

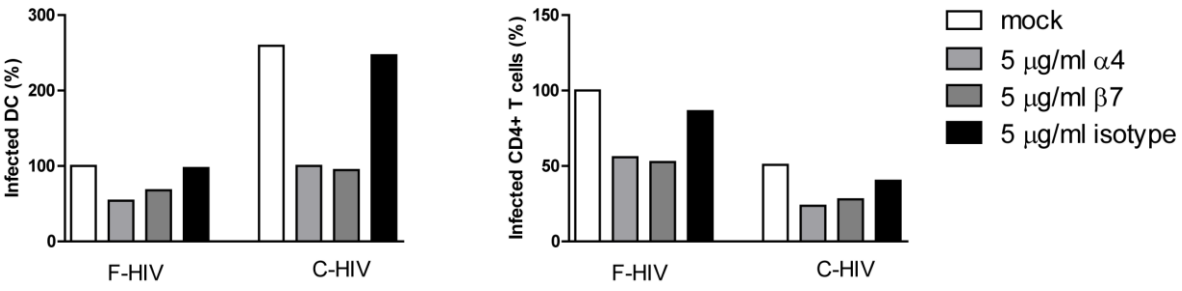
Supporting Information



Supporting Figure 1: HIV-1 infection of ectocervical and endocervical mucosa tissue explants

Endocervical and ectocervical tissue biopsies were infected with different forms of HIV-1_{BaL}, either free (F-HIV), complement opsonized (C-HIV), or virions opsonized by

a cocktail of complement and antibodies (C-Ig-HIV), by spinning the cultures for 2h at 37°C. The tissues were washed and transferred to 6-well plates and cultured for 4 days. The emigrating cells from endocervix **(A)** and ectocervix **(B)** were harvested and stained with anti-CD1a and anti-HIV-1 mAbs for DCs, and anti-CD3, anti-CD4, and anti-HIV-1 mAbs for CD4+ T cells and the level of infection was assessed by flow cytometry (N=4) **(A and B)**. The levels of HIV-1 infection of emigrating DCs and CD4+ T cells were assessed at day 4 and day 8 from the same donors **(C)**. The level of HIV-1 infection of emigrating DCs and T cells from cervical tissue biopsies (N=2) infected with HIV-1_{BaL}, HIV-MN, or HIV-ADA was assessed day 4 **(D)**. The level of HIV infection of cervical mucosa was assessed by measuring HIV-1 in the tissue culture supernatant at day 4 with a p24 ELISA (N=8) **(E)**. Statistical significance was tested using a two-sided paired t-test and $p<0.05$ was considered statistically significant. * = $p<0.05$, ** = $p<0.001$.



Supporting Figure 2: Block of α4 and β7 integrins decreased the infection of DCs and CD4+ T cells emigrating from cervical mucosa tissue

Cervical tissue biopsies were pretreated for 30min at 37°C with 5μg/ml mock, anti-α4mAb, anti-β7 mAb or isotype control mAb followed by infection with different forms of HIV-1_{BaL}, either free (F-HIV), or complement opsonized (C-HIV), by spinning the cultures for 2h at 37°C. The biopsies were washed and transferred to 6 well plates and cultured for 4 days with 5μg/ml mock, anti-α4 mAb, anti-β7 mAb, or isotype control mAb. The emigrating cells were harvested and stained with anti-CD1a and anti-HIV-1 mAbs for DCs and anti-CD3, anti-CD4, and anti-HIV-1 mAbs for CD4+ T cells and the level of infection was assessed by flow cytometry. The level of HIV-1 infection in DCs or T cells was normalized with F-HIV as 100%. (N=1).