

Representative histograms of the markers significantly modulated by RA. Quantitative distribution of one representative experiment of various markers on DCs treated with 0.1  $\mu$ M of RA (blue line) are shown compared to mock treated moDCs (green line).



Titration of RA effect on DC membrane phenotype. The fold increases in the MFIs of various markers on DCs treated with 0.1, 1, or 10  $\mu$ M of RA are shown compared to mock treated moDCs (set as 1) (means ± SEM, n= 4-14).



Soluble factors release by DCs. The concentration in pg/ml of one representative experiment of each factor released by moDCs and RA-DCs. The range of values for the complete experiments are 0-129 pg/ml for TGF $\beta$ , 370-1655 pg/ml for CCL2, 1-7 pg/ml for IL-10, 3-29 pg/ml for IL-6, 124-24152 pg/ml for CXCL8, 36-110 pg/ml, IL-12p40/p70, 54-108 for IFN $\alpha$  and 0.4-41 pg/ml for IL-2R.



**Recombinant**  $\alpha_4\beta_7$  binds moDCs. Mean fluorescence intensities (MFIs) of Streptavidin-PE-labeled  $\alpha_4\beta_7$ -Biotin (STREP- $\alpha_4\beta_7$ ) or Streptavidin-PE alone (STREP) on day 6 moDCs (left) and isolated CD4<sup>+</sup> T cells (right) from 2 donors.



Addition of  $\alpha$ RAR to the DC-T cell cocultures has no impact on the frequency of conjugates. The fold increase (mean  $\pm$ SEM, n=9) in the % of DC-T cell conjugates in moDC-T cell and RA-DC-T cell co-cultures in absence and presence of  $\alpha$ RAR compared with moDC-T cell cocultures in absence of  $\alpha$ RAR (set as 1) are shown. \*p<0.05 is considered significant; \*\*p<0.01.



**Representative plots of the T cell markers modulated by RA-DCs.** Dot plots of samples from one representative experiment of moDC-T cell and RA-DC-T cell co-cultures in absence or presence of  $\alpha$ RAR are shown. Cells were gated on lymphocyte light scatter, single, live and CD3<sup>+</sup> CD4<sup>+</sup> cells. Green squares are shown to indicate the gating strategy of the populations represented in Figure 5.



**Impact of aRAR and aMAdCAM-1 on HIV replication in DC-T cell co-cultures** (A) The fold changes in HIV copies/cell (mean  $\pm$  SEM, n= 7) for the moDC-T cell mixtures and the RA-DC-T cell cultures in the absence or presence of the aRAR are shown compared to moDC-T cell mixtures in absence aRAR (set as 1). (B) The fold changes in HIV copies/cell (mean  $\pm$  SEM, n= 7-10) for the moDC-T cell mixtures and the RA-DC-T cell cultures in the presence of the anti-MAdCAM-1 mAb or of the isotype control are shown compared to moDC-T cell mixtures in presence of the isotype control (set as 1) (\*p<0.05) (\*\*p<0.01).



**conjugates.** The fold increase (mean  $\pm$  SEM, n=2-3) in the frequency of DC-T cell conjugates in moDC-T cell and RA-DC-T cell co-cultures in presence of 10µg/ml of an  $\alpha$ MAdCAM-1 mAb (314G8) or of  $\alpha$ CD54 mAb or both are shown relative to the isotype control (set as 1).