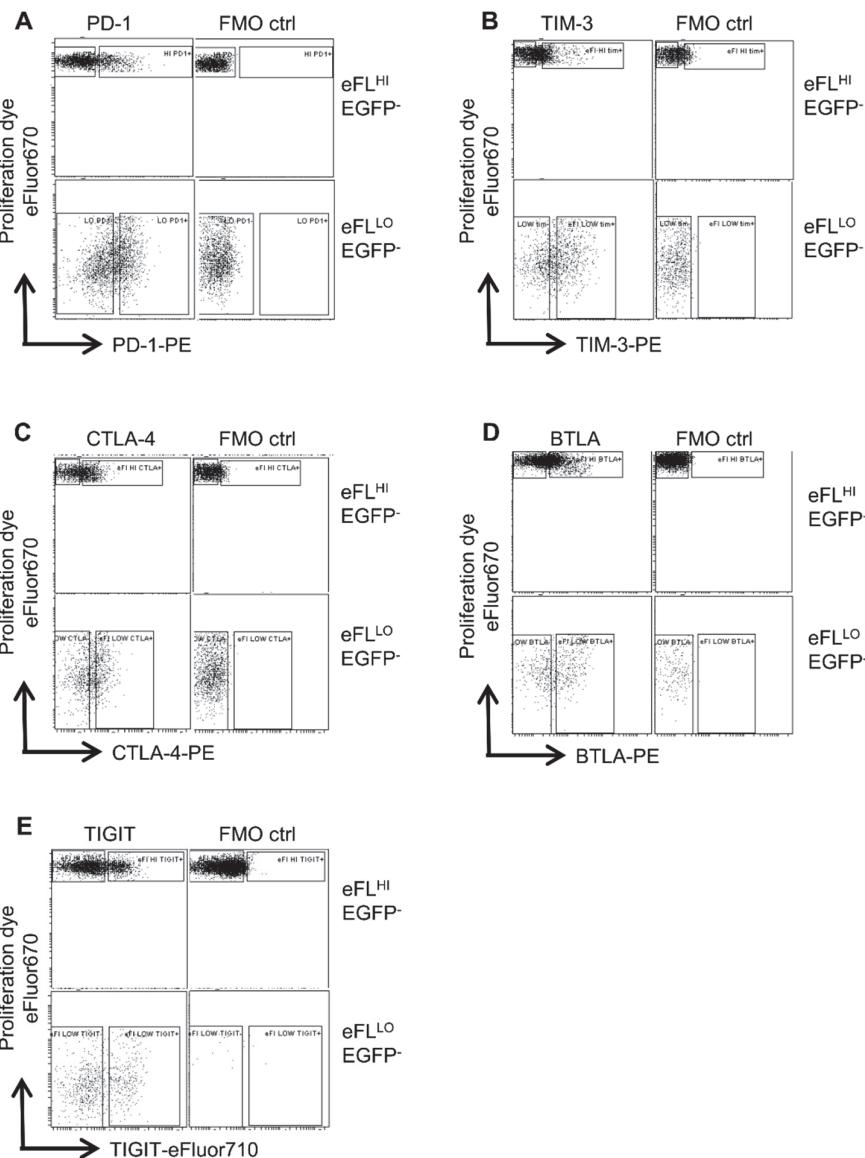


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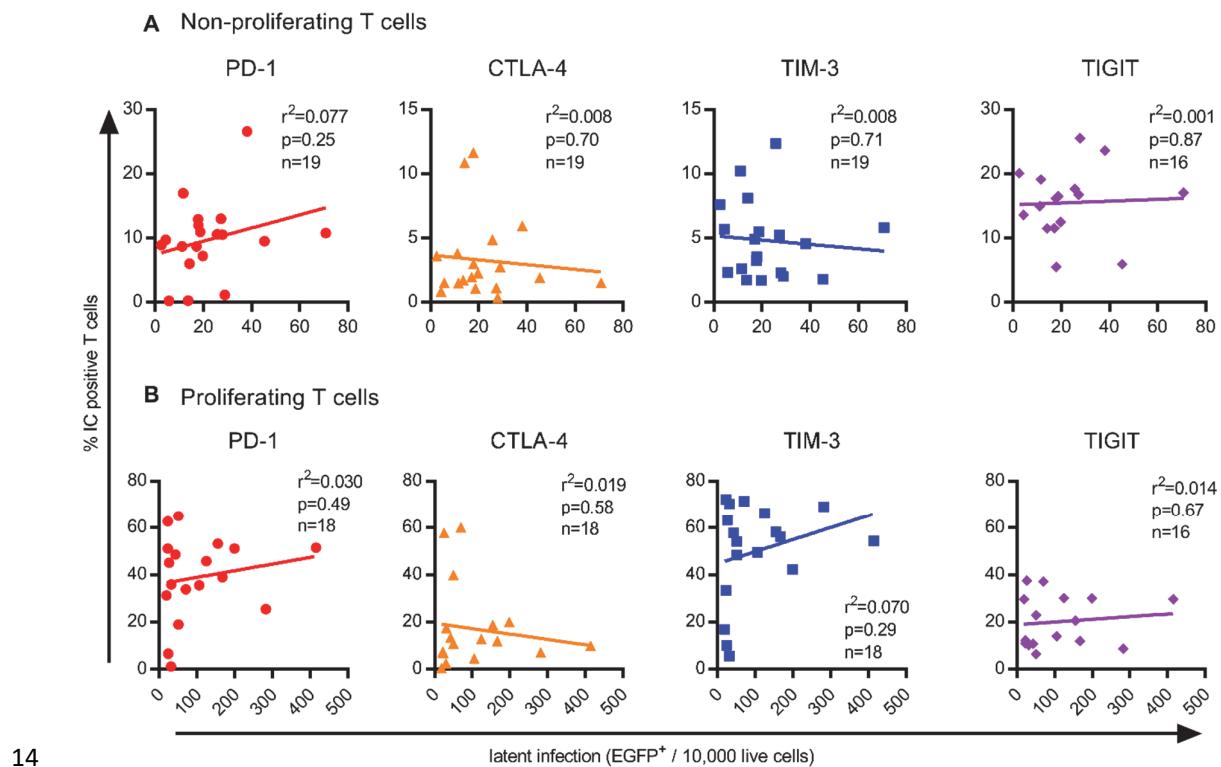
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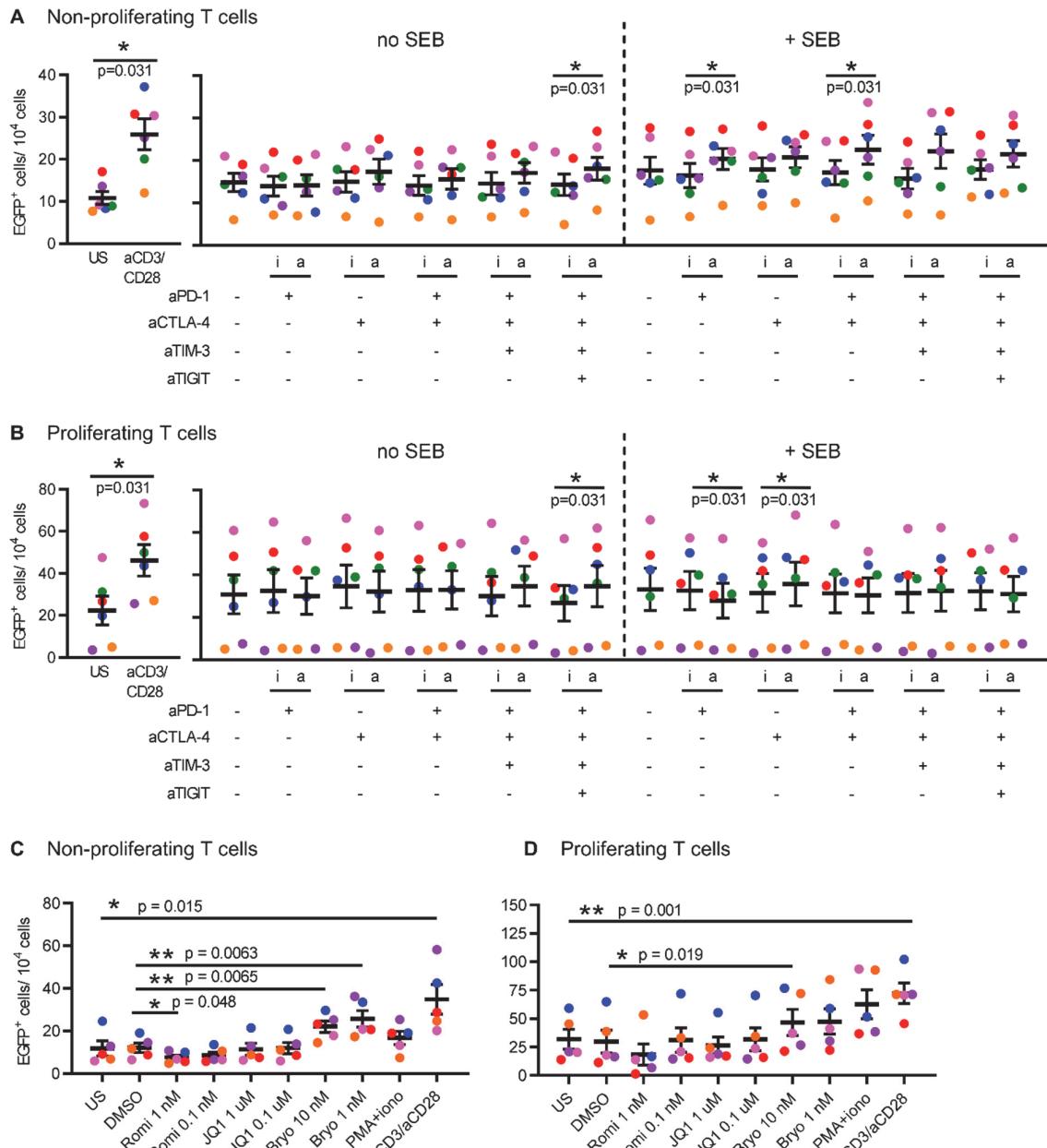
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**Figure S1. Sorting strategy to select for cells expressing high and low levels of IC molecules in non-proliferating and proliferating CD4<sup>+</sup> T cells.** Resting CD4<sup>+</sup> T cells were cultured with syngeneic monocytes in the presence of SEB and infected with EGFP-reporter virus. At day 5 post-infection CD3<sup>+</sup>HLA-DR<sup>-</sup>EGFP<sup>-</sup> (not productively infected), eFluor670<sup>HI</sup> (non-proliferating) and eFluor670<sup>LO</sup> (proliferating) T cells were further sorted based on IC molecule expression into low/negative (-) and high (+) expressing populations compared to FMO controls. Representative dot-plots of gating strategies for EGFP<sup>-</sup> eFluor670 high and low cells that express **A**: PD-1, **B**: TIM-3, **C**: CTLA-4, **D**: BTLA and **E**: TIGIT.

13



**Figure S2. No correlation between IC expression and the level of latent infection in non-proliferating and proliferating T cells.** Resting CD4<sup>+</sup> T cells were co-cultured with syngeneic monocytes in the presence of SEB and infected with EGFP-reporter HIV. At day 5 post-infection CD3<sup>+</sup>HLA-DR<sup>-</sup>EGFP<sup>-</sup> non-proliferating (A) and proliferating (B) T cells were sorted and cultured in the presence of an integrase inhibitor with and without anti-CD3/CD28+IL-7+IL-2. On day 8, EGFP<sup>+</sup> cells were measured by flow cytometry and latent infection was calculated by subtracting the number of EGFP<sup>+</sup> cells in the unstimulated culture from the number of EGFP<sup>+</sup> cells in the stimulated culture. From the day 5 samples, an aliquot was taken prior to the sort and the CD3<sup>+</sup>HLA-DR<sup>-</sup>EGFP<sup>-</sup> non-proliferating (A) and proliferating (B) T cells and were analyzed for PD-1 (red circles), CTLA-4 (orange triangles), TIM-3 (blue squares) or TIGIT (purple diamonds) expression by flow cytometry. Symbols represent individual donors. Correlation was determined using linear regression.



28  
29 **Figure S3. PD-1 blockade can reverse latent HIV but only in the presence of SEB or other**  
30 **IC blockers.** To determine the effects of IC blockers (A, B) and different LRAs (C, D) on  
31 latency reversal in vitro, resting CD4<sup>+</sup> T cells were co-cultured with syngeneic monocytes in  
32 the presence of SEB and infected with EGFP-reporter HIV. At day 5 post-infection CD3<sup>+</sup>HLA-  
33 DR<sup>-</sup> EGFP<sup>-</sup> non-proliferating (A, C) and proliferating (B, D) T cells were sorted. Sorted cells  
34 were cultured in the presence of integrase inhibitor with and without anti-CD3/CD28+IL-7+IL-  
35 2 or with an isotype (i) control or IC antibody (a) (A, B), or sorted cells were cultured with a  
36 panel of different LRAs (C, D). On day 8, EGFP<sup>+</sup> cells were measured by flow cytometry and  
37 latent infection was calculated by subtracting the number of EGFP<sup>+</sup> cells in the unstimulated  
38 culture from the number of EGFP<sup>+</sup> cells in the stimulated culture. Black lines indicate mean  
39 values ± SEM and equal colours represent equal donors across panels A-B (n=6) or C-D (n=5).  
40 \*p<0.05, \*\*p<0.01 as determined by Student's T test (n≤5) or Wilcoxon matched pairs signed  
41 rank test (n>5). US = unstimulated, aCD3/CD28 = anti-CD3/CD28+IL-7+IL-2 treated, i =  
42 isotype control, a = IC blocking antibody, Romi = romidepsin, Bryo = bryostatin.