

**Supplementary Material**

# **Enhanced IL-17 producing and maintained cytolytic effector functions of gut mucosal CD161<sup>+</sup>CD8<sup>+</sup> T cells in SIV-infected rhesus macaques**

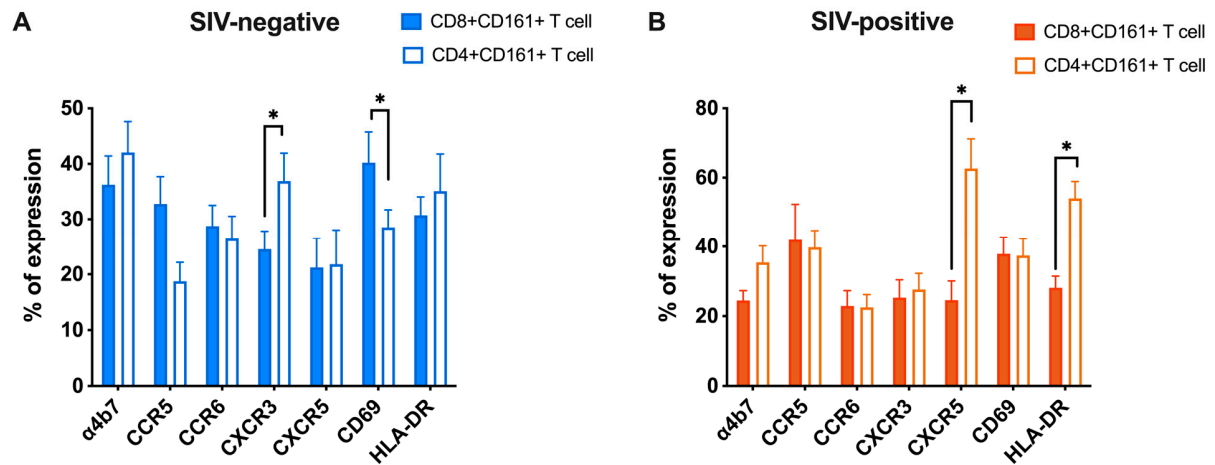
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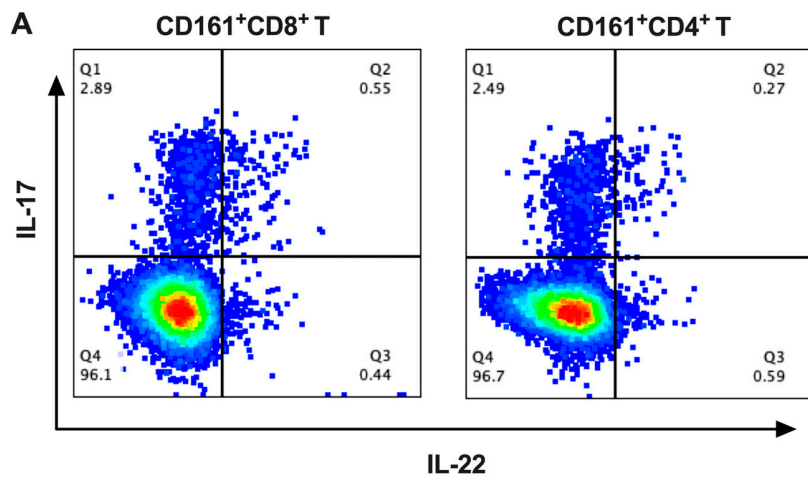
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**Figure S1. Difference between CD161<sup>+</sup>CD8<sup>+</sup> T and CD161<sup>+</sup>CD4<sup>+</sup> T cell expression of trafficking and activation markers within SIV-negative and SIV-positive groups.** Comparison of frequencies of trafficking markers ( $\alpha 4\beta 7$ , CCR5, CCR6, CXCR3, and CXCR5) and activation markers (CD69 and HLA-DR) between CD161<sup>+</sup>CD4<sup>+</sup> T cells and CD161<sup>+</sup>CD8<sup>+</sup> T cells within (A) SIV-negative group and (B) SIV-infected group of macaques are shown for PBMC isolated from 13 SIV-negative macaques and 11 chronic SIV-infected macaques. Error bars show mean and SEM for each group. Groups were compared using Wilcoxon matched-pairs signed-rank test. Asterisks indicate significant differences between the groups (\* $p < 0.05$ ).



**Figure S2. Flow cytometry plots showing CD161<sup>+</sup> T cell subsets expressing IL-17 and/or IL-22 in a SIV-infected macaque.** Intracellular cytokine staining for IL-17 and IL-22 cytokines was carried out on CD161-expressing T cells and evaluated by gating on CD161<sup>+</sup> CD8<sup>+</sup> T cells and CD161<sup>+</sup>CD4<sup>+</sup> T cells.

Supplementary Table S1. Antibodies for Flow Cytometric Analysis.

Antibody	Flouochrome	Vendor	Clone	Catalog #
FVS700	AF700	BD		564997
CD45	BV510	BD	D058-1283	563530
CD3	APC-Cy7	BD	SP34-2	557757
CD4	BV650	BD	L200	563737
CD8	BV605	BD	SK1	564116
CD161	PE-Cy7	Biolegend	HP-3G10	339918
TCR g/d	PE-Cy7	Biolegend	B1	331222
TCR Va7.2	BV421	Biolegend	3C10	351716
CCR5/ CD195	APC	BD	3A9	560748
CCR6/ CD196	PCP-Cy5.5	BD	11A9	560467
CXCR3/ CD183	BV510	Biolegend	G025H7	353726
CXCR5	AL488	BD	RF8B2	558112
IL-18R $\alpha$	PE	R&D	70625	FAB840P
CD69	PE-CF594	BD	FN50	562617
Granzyme B	PE	BD	GB11	561142
IFN- $\gamma$	BV510	Biolegend	4S.B3	502544
IL-17	PCP-Cy5.5	eBioscience	eBio64DEC17	12-7179-42
IL-22	APC	Invitrogen	IL22JOP	17-7222-82
TNF- $\alpha$	AF700	BD	MAb11	557996
CD1dTM	APC	<i>NIH Tetramer core</i>		
$\alpha_4\beta_7$	APC	<i>NHP Reagent resource</i>	A4B7R1	AB_2819257