

Supplementary Figures S1 to S4

Title: IgG from adult atopic dermatitis (AD) patients induces non-atopic neonatal thymic gamma-delta T cells ($\gamma\delta$ T) to acquire IL-22/IL-17 secretion profile with skin-homing properties and epigenetic implications mediated by miRNA

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Figure S1

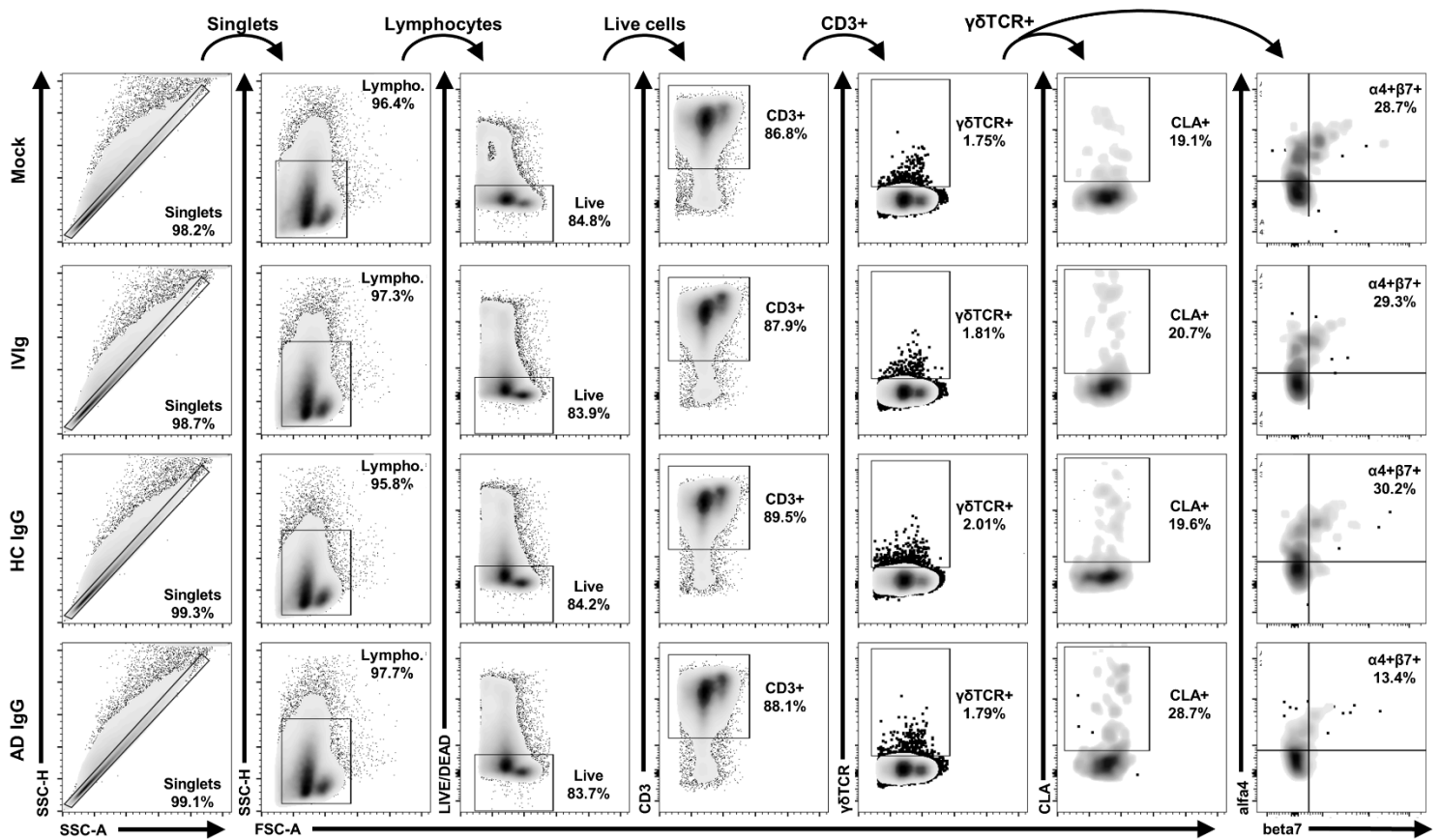


Figure S1: Illustrative dot plots of the gating strategy used to identify $\gamma\delta$ T cells and evaluate the expression of homing phenotype. Each sample was acquired by a consecutive approach using a single-cell gate (determined by SSC-A/SSC-H parameters), a lymphocyte gate (determined by relative SSC-A/FSC-A), a Live cells gate, a CD3+ cells gate, and a $\gamma\delta$ TCR gate to determine $\gamma\delta$ T (CD3+ $\gamma\delta$ TCR+) cells. Samples were then acquired as CLA+ or $\alpha 4 + \beta 7$ +. This figure illustrates the gating strategy used to determine $\gamma\delta$ T cells and its phenotype on mock, IVIg, HC IgG and AD IgG culture conditions (from upper to lower panels).

Figure S2

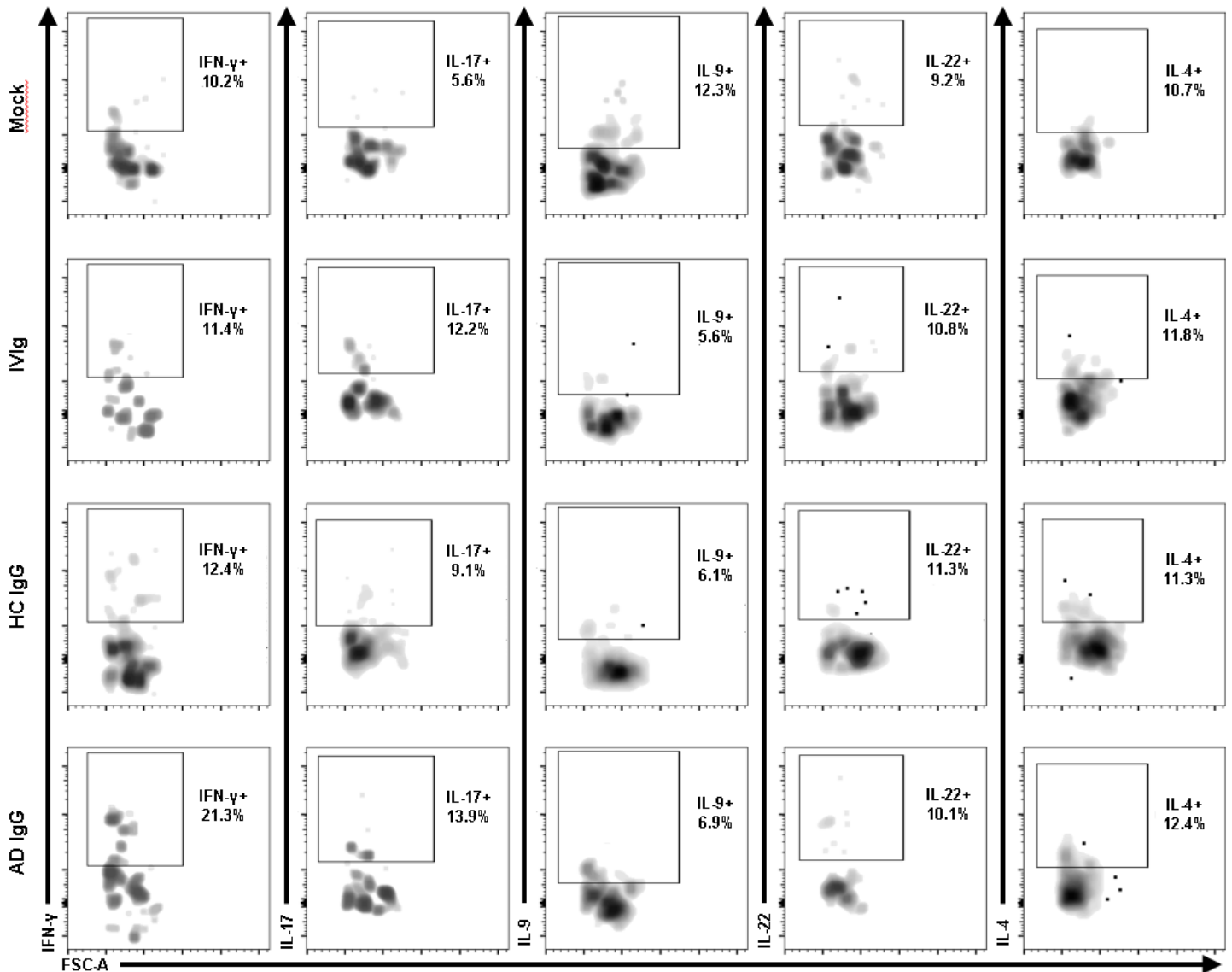


Figure S2: Illustrative dot plots of the gating strategy used to evaluate the production of cytokines on $\gamma\delta$ T cells after culture. Each sample was acquired by a consecutive approach using a single-cell gate (determined by SSC-A/SSC-H parameters), a lymphocyte gate (determined by relative SSC-A/FSC-A), a Live cells gate, CD3+ cells gate and $\gamma\delta$ TCR+ gating to determine $\gamma\delta$ T cells. Samples were then acquired as IFN- γ +, IL-17+, IL-19+, IL-22+ and IL-4+. This figure illustrates the gating strategy used to evaluate cytokines expression on mock, IVIg, HC IgG and AD IgG culture conditions (from left to right panels).

Figure S3

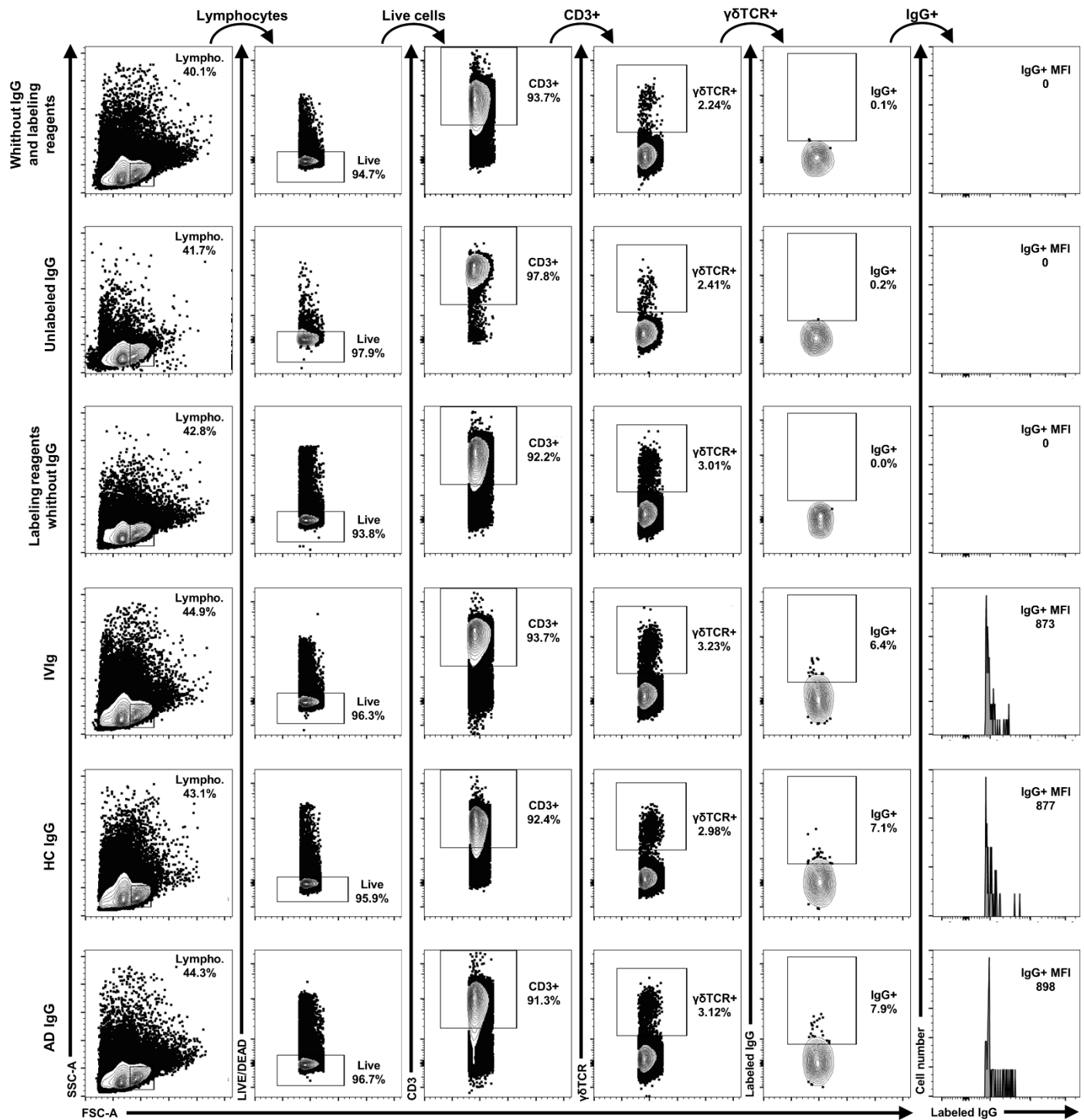


Figure S3: Illustrative dot plots of the gating strategy used to evaluate IgG-membrane interaction on $\gamma\delta$ T cells after culture. Each sample was acquired by a consecutive approach using a single-cell gate (determined by SSC-A/SSC-H parameters), a lymphocyte gate (determined by relative SSC-A/FSC-A), a Live cells gate, CD3+ cells gate and $\gamma\delta$ TCR+ gating to determine $\gamma\delta$ T cells. Samples were then acquired in the presence of Zenon human IgG labeling kit reagents but without IgG, in the presence of unlabeled AD IgG (IgG), in the presence of labeled IVIg, labeled IVIg HC IgG, or in the presence of labeled AD IgG. This figure illustrates the gating strategy used to detect IgG-membrane interactions in the cited conditions from upper to lower panels.

Figure S4

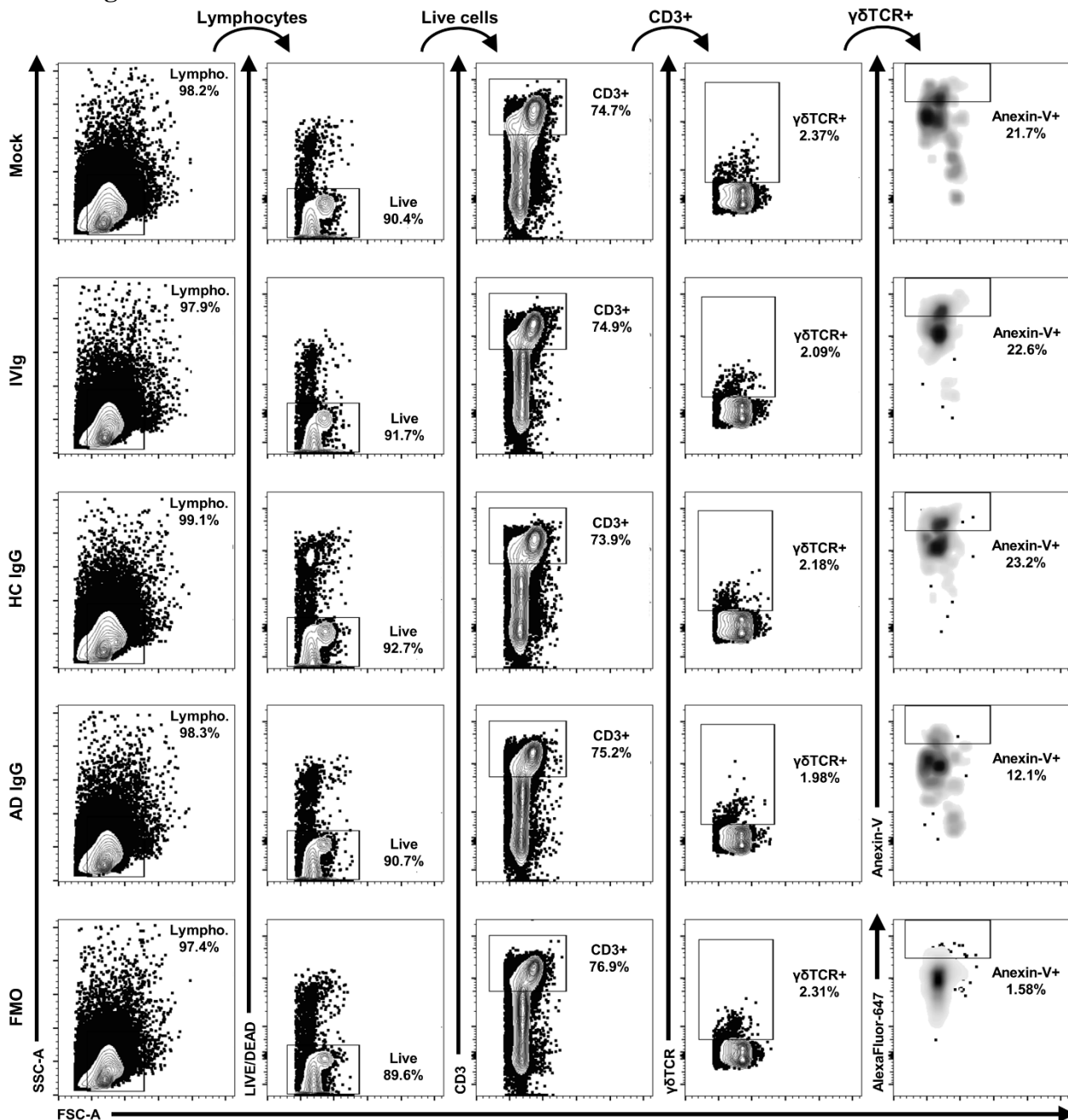


Figure S4: Illustrative dot plots of the gating strategy used to identify $\gamma\delta$ T cells and its staining with Annexin V. Each sample was acquired by a consecutive approach using a single-cell gate (determined by SSC-A/SSC-H parameters), a lymphocyte gate (determined by relative SSC-A/FSC-A), a Live cells gate, a CD3+ cells gate, and a $\gamma\delta$ TCR gate to determine $\gamma\delta$ T (CD3+ $\gamma\delta$ TCR+) cells. Samples were then acquired as Annexin V+. This figure illustrates the gating strategy used to determine $\gamma\delta$ T cells and its Annexin V+ staining on mock, IVIg, HC IgG, AD IgG culture conditions. The lower panel demonstrate the Fluorescence minus one (FMO) gating strategy to precisely determine Annexin V gate.