#### **Supplementary Material**

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**Figure S1. Cytokine expression profiles of T cells isolated from normal skin biopsies (n=6).** T cells were isolated from healthy human skin samples. Percentages of cytokine expressing T cells are shown for (a) CD4<sup>+</sup> T cells and (b) CD8<sup>+</sup> T cells



Figure S2. CD8<sup>+</sup> T cells isolated from skin biopsies secrete IL-13 (upper left panel) and IFN- $\gamma$  (lower left panel) as determined by ELISA. The CD8<sup>-</sup> T cell population (mainly including CD4<sup>+</sup> T cells, right panels) produces amounts of IL-13 and IFN- $\gamma$  comparable to the CD8<sup>+</sup> population.



Figure S3. High numbers of CD4<sup>+</sup> and CD8<sup>+</sup> T cells isolated from AD (n=4) and psoriasis (n=4) produced IL-22. Horizontal bars represent median percentages for each group



#### **Atopic Dermatitis**

**Figure S4.** CD8<sup>+</sup> T cells from AD patients (n=4) show significantly higher expression levels of VLA-1 compared to CD4<sup>+</sup> T cells. Horizontal bars represent median percentages for each group. \*\* P<0.01



**Figure S5.** The percentages of CD4<sup>+</sup> and CD8<sup>+</sup> T cells isolated from normal skin biopsies are stable during five weeks *ex vivo* culture.