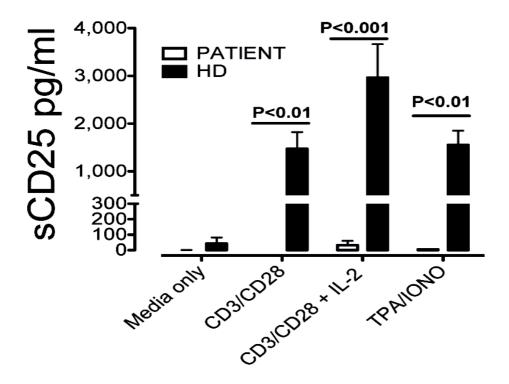
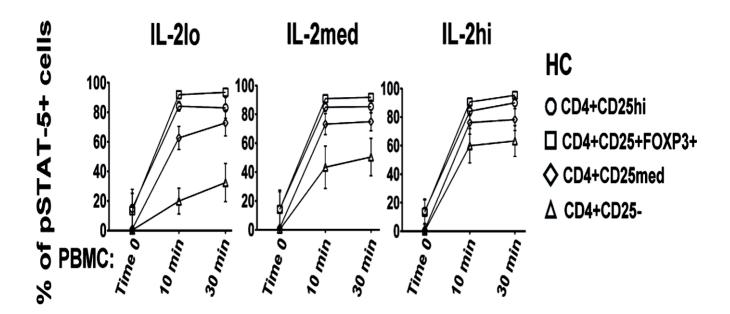
# Suppl. Figure 1



#### Supplementary Figure 1. sCD25 levels from stimulated PBMCs

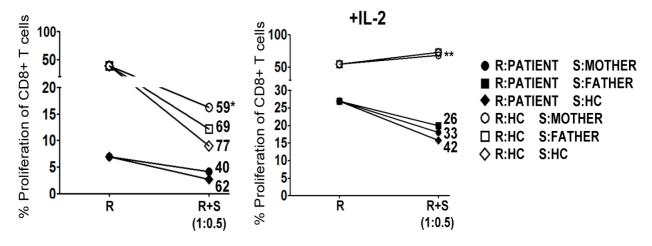
PBMCs from the CD25 deficient patient (3 different time points) and adult healthy donors (n=6) were cultured alone or after stimulation with CD3/CD28, CD3/CD28 + 1000U/ml IL-2 or TPA/Iono stimulation for 3 days and sCD25 was measured in cell supernatant.

## Suppl Figure 2



**Supplementary Figure 2.** IL-2 responses among CD4<sup>+</sup> T cell populations
The sensitivity of CD4<sup>+</sup> T cells from healthy controls (n=3) to respond to IL-2lo
(10U/ml), IL-2med (100U/ml), and IL-2hi (1000U/ml) after 0, 10 or 30 minutes
of stimulation was determined by pSTAT5 staining. To classify the CD4<sup>+</sup> T cells stained, PBMCs were stained for CD4, CD25, and FOXP3 and the
percent pSTAT5 was determined for each group.

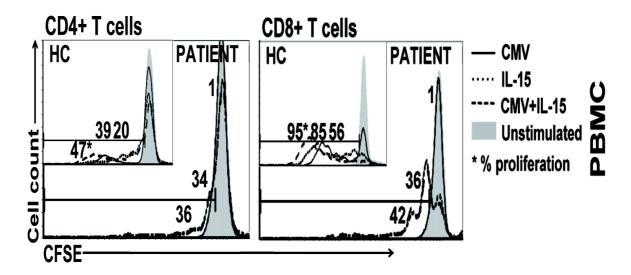
### Suppl. Figure 3



### **Supplementary Figure 3.** Suppression of CD8<sup>+</sup> T cells

Responding (R) CD8<sup>+</sup> T cells isolated from the patient (closed symbols) or healthy controls (open symbols) were evaluated for the ability to proliferate and be suppressed (S) by CD4<sup>+</sup>CD25<sup>+</sup> cells isolated from the patient's mother, father, and healthy donors at a ratio of 1 responder to 0.5 suppressor. IL-2 was supplemented at (100U/ml).

# Suppl. Figure 4



**Supplementary Figure 4.** Proliferation of CD4<sup>+</sup> and CD8<sup>+</sup> T cells to CMV Ags.

Representative FACS plots of gated CD4<sup>+</sup> and CD8<sup>+</sup> T cells from CFSE-labeled PBMCs of the patient (large histograms) and healthy controls (embedded histograms) after exposure to CMV or IL-15 or the combination thereof.