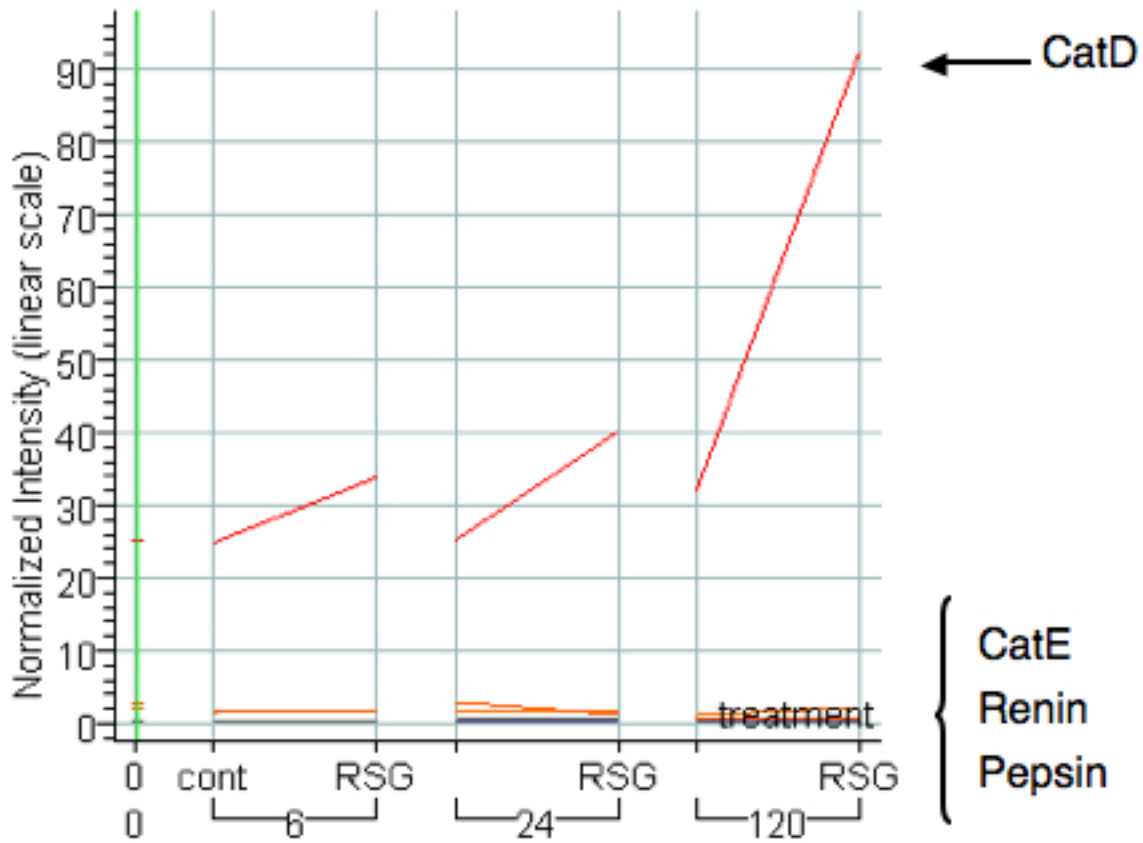
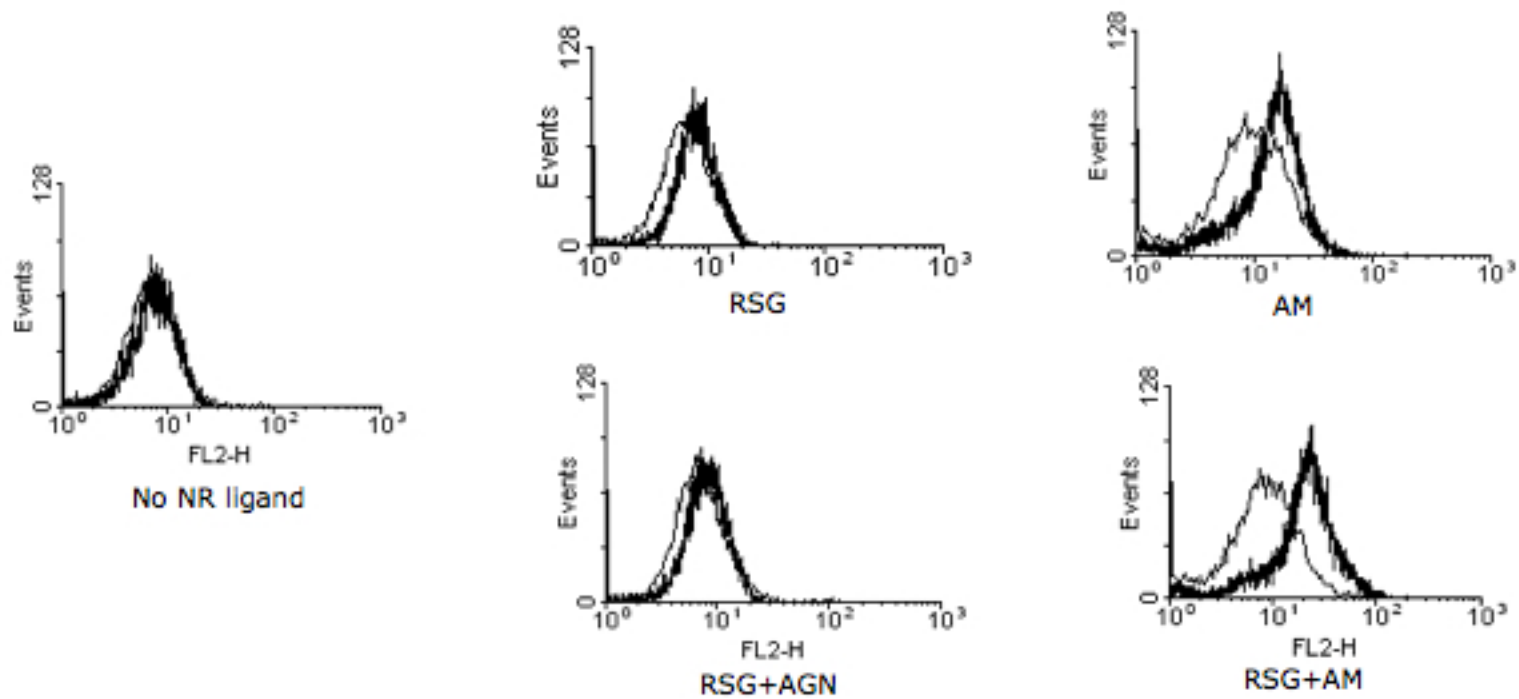


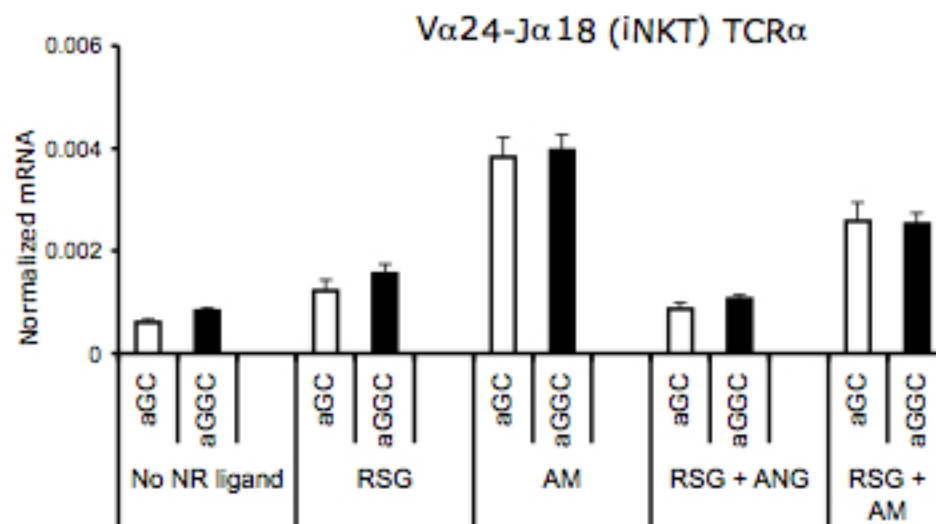
Supplementary figure 1.



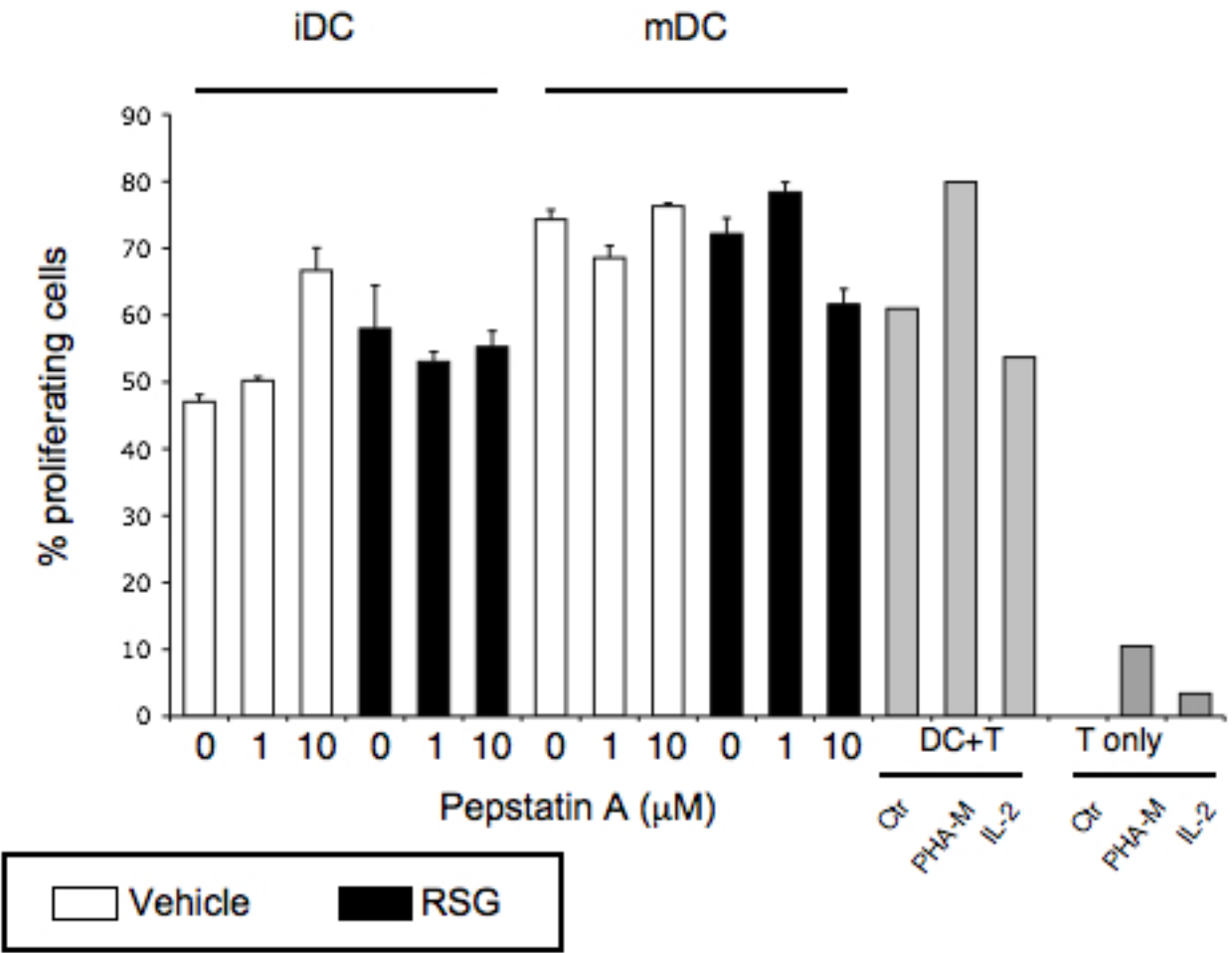
A



B

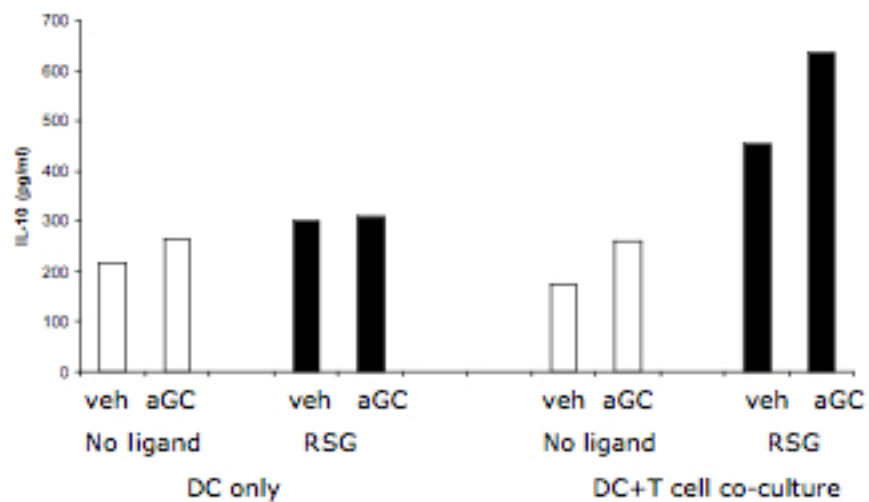


Supplementary figure 3.



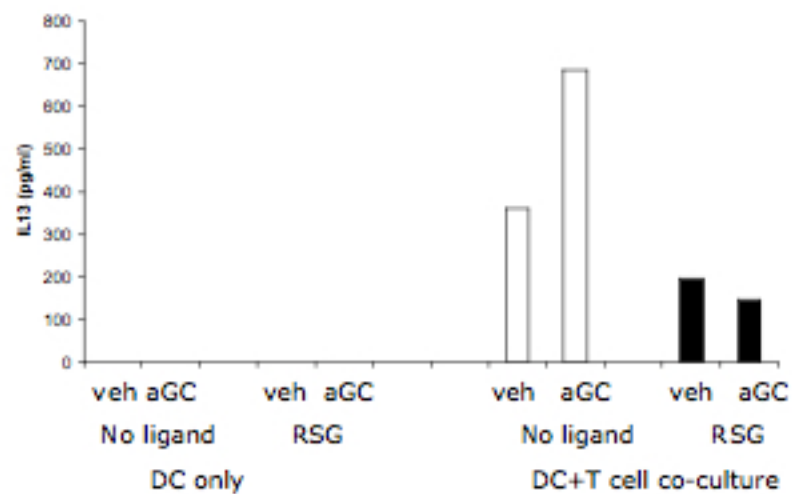
A

IL-10 production

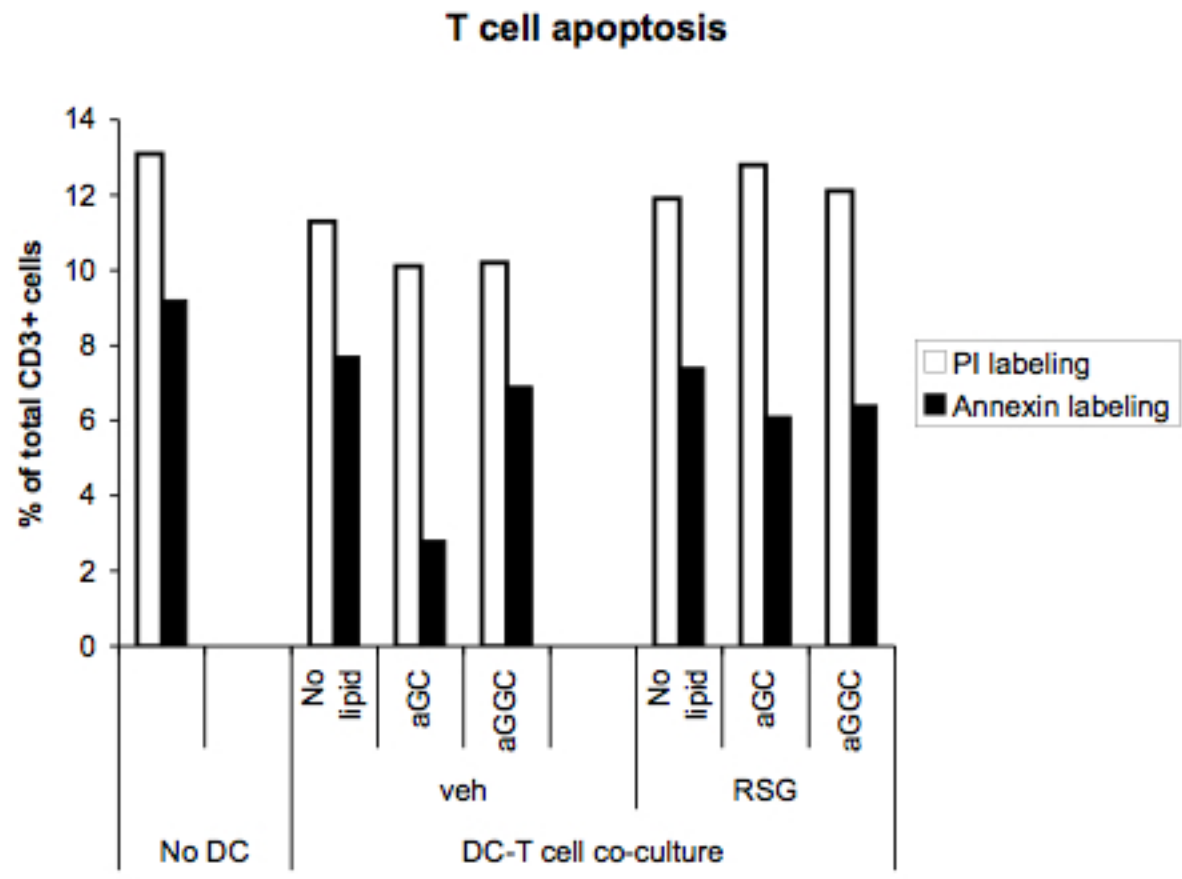


B

IL13 production



□ No PPAR γ ligand ■ RSG



LEGENDS OF SUPPLEMENTARY FIGURES

Supplementary figure 1: Expression levels of aspartic proteases in monocyte-derived DC. Since Pepstatin A is also capable of inhibiting other aspartic proteases than Cathepsin D, the expression level of additional aspartic proteases (Cathepsin E, Renin and Pepsin) were evaluated in mo-derived iDC with or without PPAR γ -stimulation at 3 time points. The relative expression of aspartic proteases were assessed by using affymetrix microarray data. The line graph shows raw data of gene expression as per chip normalization. Microarray data was analyzed in GeneSpring 7.2 software (Agilent).

Supplementary figure 2: Effect of DC nuclear receptor activation on CD1d expression and iNKT expansion. (A) Lipid pulsed DCs were treated with the PPAR γ agonist RSG, the RAR α agonist AM580, the RAR α antagonist AGN193109 or with the combination of above ligands. Cell surface expression of CD1d protein was measured by FACS. (B) Nuclear receptor ligand treatment of DCs modulates iNKT expansion. RT-qPCR measurements are shown.

Supplementary figure 3: Inhibition of cathepsin D by pepstatin A does not affect conventional MHCI/MHCII-mediated peptide presentation. iDC or mature DC (mDC) (1×10^4) differentiated in the presence of vehicle or 2.5 μ M RSG were harvested and co-cultured with allogeneic monocyte depleted CFSE-labeled PBMC (1×10^5) for 5 days. Cells were harvested and proliferation was assessed by CFSE-dilution measured by

flow cytometry. One representative experiment out of 4 is shown. The cathepsin D specific inhibitor, pepstatin A, was added to the differentiating DC cultures at day 3 at the indicated concentrations.

Supplementary figure 4: Cytokine production by iNKT cells. Cytokine production by sorted iNKT cells in the presence of PPAR γ activated monocyte derived dendritic cells. For the exclusion of the cytokine production derived from DCs, samples in which only DCs were cultured are also shown. Production of IL-10 and IL-13 cytokines were monitored by ELISA after 36h co-culture. White bars: no PPAR γ activation, black bars: PPAR γ activation by RSG treatment of DCs.

Supplementary figure 5: Measurement of T cell apoptosis in DC-T cell co-cultures. DCs pulsed with lipid antigens were co-cultured with autologous T cells. T cells were stained with PC5 labeled anti-human CD3 and then labeled with propidium iodide (white bars) or annexin-FITC (black bars) for the detection of apoptosis. CD3⁺ cells were analyzed for apoptosis by FACS.