

## Supp. Figure 1.

IFN $\gamma$  production by *i*NKT and NK cells in DC co-cultures is TLR9 dependent. Flt3L (*A*) or GM-CSF (*B*) derived BMDC from *Tlr9<sup>cpg/cpg</sup>* mice were treated with CpG-ODN or control treated and cultured with purified *i*NKT cells or NK cells for 48h. Flt3L (*C*) or GM-CSF (*D*) derived BMDC from *Tlr9<sup>cpg/cpg</sup>* were mock or MCMV infected and cultured with purified *i*NKT cells or NK cells for 48h. Supernatants were analyzed for IFN $\gamma$  by ELISA, and shown is a representative experiment of 3 performed. ELISA results represent the mean of one experiment with three replicate cultures measured in triplicate. Error bars represent SEM (n = 9 for each set of BMDC).



## Supp. Figure 2.

No-touch isolation of *i*NKT cells. *A*, Pre-enrichment splenocytes of C57BL/6 4get mice were analyzed for eGFP<sup>+</sup> cells (*left panel*). Analysis of pre-enrichment eGFP<sup>+</sup> cells analyzed for CD44<sup>+</sup> and CD1d  $\alpha$ GalCer tetramer<sup>+</sup> *i*NKT cells (*right panel*). *B*, Postenrichment splenocytes of C57BL/6 4get mice analyzed for eGFP<sup>+</sup> cells (*left panel*). Analysis of post-enrichment eGFP<sup>+</sup> cells analyzed for CD44<sup>+</sup> and CD1d  $\alpha$ GalCer tetramer<sup>+</sup> *i*NKT cells (*right panel*). *C*, Post sort analysis of GFP<sup>bright</sup> splenoyctes for CD44<sup>+</sup> and CD1d  $\alpha$ GalCer tetramer<sup>+</sup> *i*NKT cells. *A-C*, Percentages represent gated eGFP<sup>+</sup> and gated *i*NKT cells. Numbers represent absolute number of *i*NKT cells per spleen. Data are representative of 8 independent experiments.



Supp. Figure 3.

NK and *i*NKT cell STAT4 activation. Splenocytes and liver mononuclear cells (data not shown) were isolated from naïve C57BL/6 4get mice and left untreated or stimulated with IFN $\beta$ , IL-12, or IL-18 alone (*A and B*) or in combination (*C*) for 1 hour and cells were collected and stained to detect intracellular STAT4 phosphorylation. (*A-B*), Flow cytometric analysis of (*A*) CD19<sup>-</sup>, CD3<sup>-</sup>, NK1.1<sup>+</sup> NK cells (*B*) or CD19<sup>-</sup>, CD8<sup>-</sup>, CD3<sup>+</sup> CD44<sup>+</sup> GFP<sup>+</sup> *i*NKT cells left untreated (shaded histogram) or cultured with hi dose IL-12 (1ng/ml), IL-18 (1ng/ml) or IFN $\beta$  (1000U/ml) indicated by the solid line. (*C*), Flow cytometric analysis of CD19<sup>-</sup>, CD8<sup>-</sup>, CD3<sup>+</sup> CD44<sup>+</sup> GFP<sup>+</sup> *i*NKT cells left untreated (shaded histogram) or cultureated with low dose of IL-12 (10pg/ml), IL-18 (10pg/ml), and IFN $\beta$  (10U/ml) as indicated and represented by the solid line. Data are representative histogram plots of 3 mice per condition cultured in triplicated.



## Supp. Figure 4.

Depletion of CD8<sup>+</sup> T cells does not alter day 4 MCMV innate defenses. Groups of BALB/c J $\alpha$ 18<sup>-/-</sup> *i*NKT cell-deficient mice were depleted of CD8<sup>+</sup> T cells or not, and subsequently infected with MCMV. MCMV replication levels in the liver (A), and spleen (B), are shown day 4 post infection. Results are representative of 4 mice per group. Error bars represent SEM (n=4 for each group).