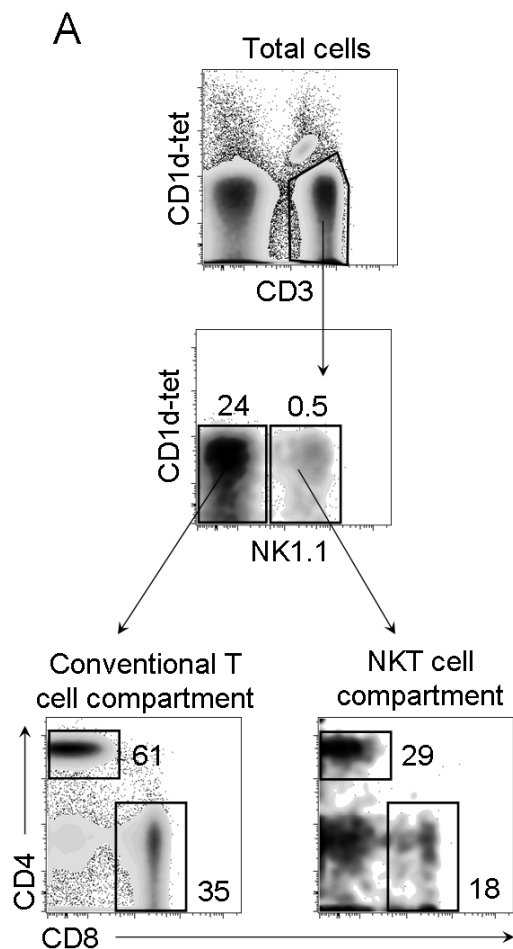


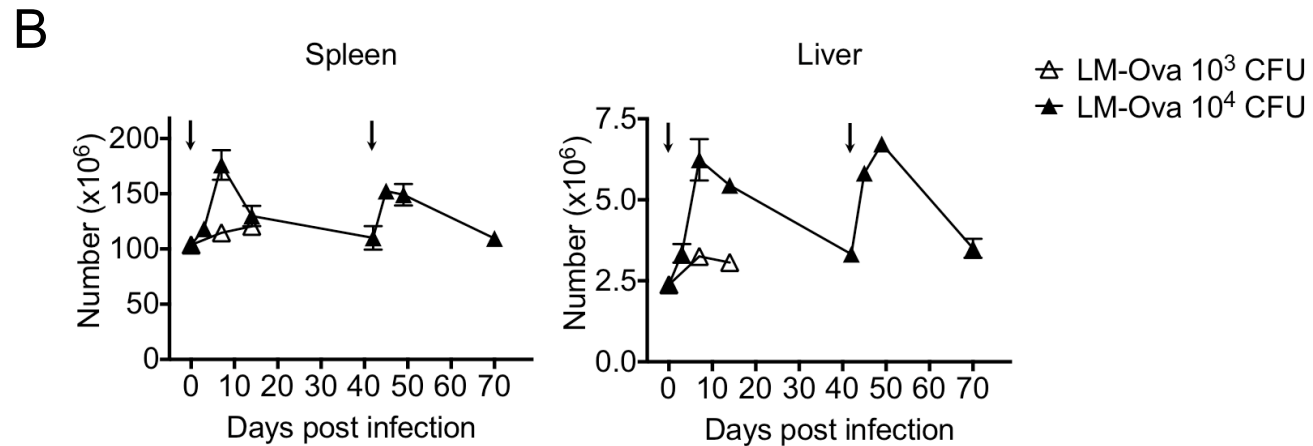
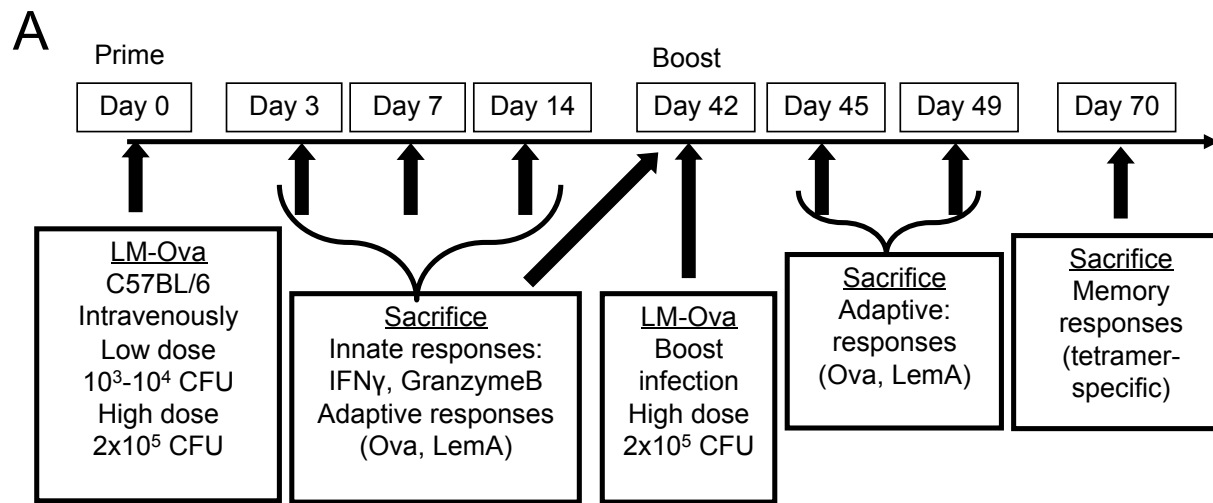
**Supplemental Figure 1. Gating scheme and sorted cell subsets.** (A) NK cells were sorted as CD1d-tet<sup>-</sup>CD3<sup>-</sup>NK1.1<sup>+</sup>DX5<sup>+</sup> cells. (B) iNKT cells were sorted as CD1d-tet<sup>+</sup>CD3<sup>+</sup> cells. (C) NKT cells were sorted as CD1d-tet<sup>+</sup>CD3<sup>+</sup>NK1.1<sup>-</sup> cells. (D) CD8<sup>+</sup> conventional T cells were sorted as CD1d-tet<sup>-</sup>CD3<sup>+</sup>CD8<sup>+</sup>NK1.1<sup>-</sup> cells. (E) CD8<sup>+</sup> NKT cells were sorted as CD1d-tet<sup>+</sup>CD8<sup>+</sup>CD3<sup>+</sup>NK1.1<sup>+</sup> cells.



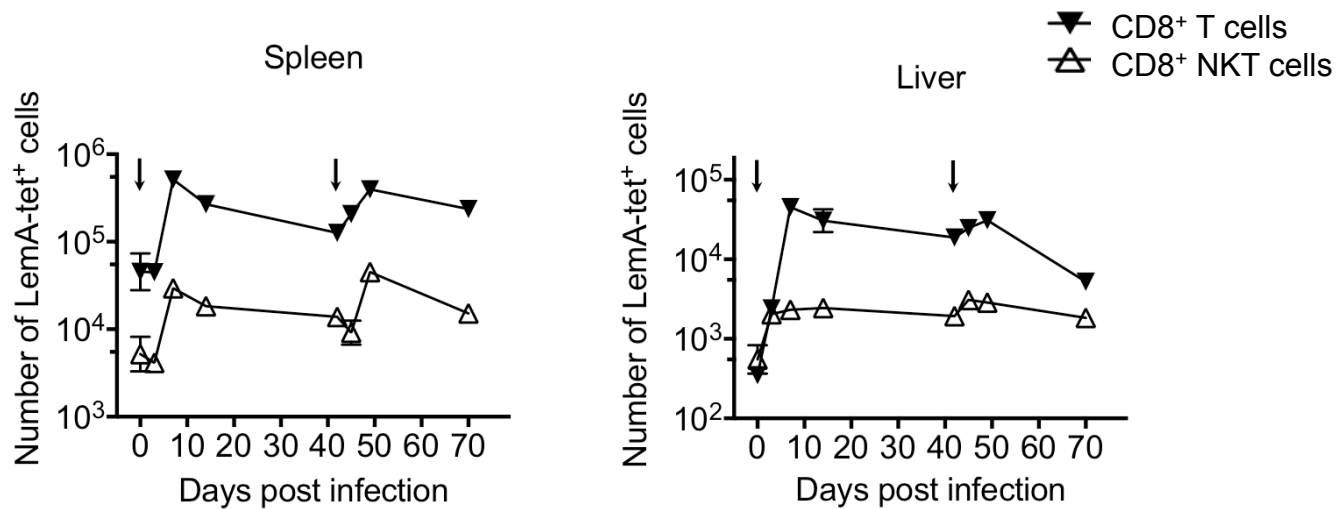
**B**

Receptors	CD8 <sup>+</sup> T cells	CD8 <sup>+</sup> NKT cells	Total NKT cells	NK cells	iNKT cells
CD127	56.2 +/- 2.1	62.9 +/- 4.0	64.2 +/- 1.3	5.6 +/- 1.5	77.8 +/- 3.6
CD132	75.9 +/- 3.5	85.3 +/- 2.5	86.7 +/- 2.1	73.3 +/- 1.4	91.6 +/- 0.7
CD19	2.5 +/- 0.7	13.7 +/- 3.2	23.0 +/- 2.2	5.6 +/- 1.3	3.7 +/- 0.8
CD244	0.7 +/- 0.1	32.3 +/- 4.9	47.1 +/- 5.7	95.0 +/- 1.8	2.0 +/- 0.9
CD27	80.9 +/- 2.3	84.0 +/- 5.6	83.7 +/- 2.2	60.4 +/- 8.1	46.6 +/- 6.1
CD44	60.0 +/- 0.9	97.3 +/- 0.4	98.7 +/- 0.2	99.4 +/- 0.6	99.9 +/- 0.1
CD62L	49.3 +/- 5.3	58.7 +/- 6.2	40.4 +/- 1.9	75.2 +/- 4.2	1.2 +/- 0.7
CD94	1.3 +/- 0.3	47.8 +/- 4.0	52.3 +/- 4.2	49.5 +/- 1.9	28.7 +/- 0.9
MHC class II	2.6 +/- 0.6	13.4 +/- 3.1	21.0 +/- 5.3	6.0 +/- 1.2	2.2 +/- 0.7
CD49b	1.9 +/- 0.7	57.9 +/- 5.1	50.3 +/- 7.0	92.4 +/- 2.0	5.0 +/- 0.7
Ly49A	0.9 +/- 0.1	36.9 +/- 2.6	37.6 +/- 3.3	10.3 +/- 0.8	4.2 +/- 1.5
Ly49A/D	1.2 +/- 0.2	34.8 +/- 1.2	29.3 +/- 1.0	62.5 +/- 0.3	5.3 +/- 1.2
Ly49C/I	0.8 +/- 0.3	21.1 +/- 2.5	24.2 +/- 4.1	48.0 +/- 3.6	2.6 +/- 0.5
Ly49D	0.4 +/- 0.2	9.9 +/- 2.9	19.9 +/- 5.4	52.6 +/- 1.0	1.0 +/- 0.4
Ly49G	0.1 +/- 0.1	10.9 +/- 3.2	18.2 +/- 2.2	0.8 +/- 0.1	0.2 +/- 0.1
Ly49H	0.4 +/- 0.1	9.8 +/- 4.0	18.7 +/- 5.3	52.5 +/- 1.1	1.3 +/- 0.7
Ly49I	0.6 +/- 0.1	17.1 +/- 1.7	14.1 +/- 0.7	44.6 +/- 2.9	3.4 +/- 1.0
NKG2A	1.8 +/- 0.5	45.2 +/- 2.7	55.6 +/- 4.3	44.4 +/- 0.8	35.9 +/- 3.2
NKG2D	2.0 +/- 0.2	47.7 +/- 3.3	47.1 +/- 4.6	75.9 +/- 4.1	50.5 +/- 0.3
NKp46	0.3 +/- 0.1	15.6 +/- 3.8	27.1 +/- 4.2	94.3 +/- 1.1	0.9 +/- 0.5

**Supplemental Figure 2. Phenotypic comparison of CD8<sup>+</sup> T cells from conventional T cell versus NKT cell compartments.** (A) Plots show the distribution of CD4 versus CD8 among conventional T cell compartment (NK1.1<sup>-</sup>CD3<sup>+</sup>CD1d-tet<sup>-</sup>) versus NKT cell compartment (NK1.1<sup>+</sup>CD3<sup>+</sup>CD1d-tet<sup>-</sup>). (B) CD8<sup>+</sup> T cells from the conventional T cell compartment (NK1.1<sup>-</sup>CD3<sup>+</sup>CD8<sup>+</sup>CD1d-tet<sup>-</sup>) and NKT cell compartment (NK1.1<sup>+</sup>CD3<sup>+</sup>CD8<sup>+</sup>CD1d-tet<sup>-</sup>) were compared for the expression of the indicated receptors. Shown as controls, NK (NK1.1<sup>+</sup>DX5<sup>+</sup>CD3<sup>-</sup>CD1d-tet<sup>-</sup>), iNKT (NK1.1<sup>+</sup>CD3<sup>+</sup>CD1d-tet<sup>+</sup>), and total NKT (NK1.1<sup>+</sup>CD3<sup>+</sup>CD1d-tet<sup>-</sup>) cells. Numbers indicate the frequency of positive cells as mean ± s.e.m. Data are representative of two independent experiments, *n* = 6.



**Supplemental Figure 3. Experimental design.** (A) Mice were intravenously injected with *Listeria monocytogenes* (expressing Ovalbumin, LM-Ova) at day 0 and day 42 (depicted as arrows in graphs). In prime/boost setting prime dose was  $10^4$  CFU and boost dose was  $2 \times 10^5$  CFU. For prime dose response single  $10^3$  CFU and  $2 \times 10^5$  CFU infections were also used. Mice were sacrificed at days 0, 3, 7, 14, 42, 45, 49, and 70 and innate (IFN $\gamma$ , CD107, CD69, Granzyme B) and adaptive (Ova-tetramer, LemA-tetramer, OVA or LemA peptide ex vivo stimulation of recall responses) were studied. (B) Graphs of kinetics of absolute number for total splenocytes and liver lymphocytes in WT mice are shown in response to LM-Ova. Data are representative of three independent experiments,  $n = 9$  (days 0, 7, 49),  $n = 6$  (days 3, 14, 42, 45, 70), mean  $\pm$  s.e.m.



**Supplemental Figure 4. Tracking LemA-specific T cells among conventional CD8<sup>+</sup> T cells and CD8<sup>+</sup> NKT cells.** Mice were infected with 10<sup>4</sup> CFU of LM-Ova on day 0 and re-challenged with 2x10<sup>5</sup> CFU on day 42, as indicated by arrows. Graphs show kinetics of absolute number of LemA-tetramer positive cells among CD8<sup>+</sup> NKT and CD8<sup>+</sup> T cells in spleen and liver. Data are representative of three independent experiments, *n* = 4 for each time point (for days 0, 7, 49) and data are representative from one of two independent experiments *n* = 3 for each (for days 3, 14, 42, 45, 70), mean ± s.e.m.