Fig S1: Inhibition of several cytokines does not modify pneumonitis lethality in mice treated with pSushi-IL15-Apo.
Mice treated as in figure 1A were knock out for the indicated genes (IFNγ, IFNAR, APO A-I and SR-B1) or were treated with 200μg of ethanercept (Enbrel) the same day that the gene transfer and each 2 days thereafter until death. Experiments are representative of two similarly performed.
Fig S2: Pharmacokinetics, bioactivity and incorporation into HDL of Sushi-IL15.

(A) IL-15 bioactivity on CTLL2 cells in serial serum dilutions from mice given the indicated plasmid doses by hydrodynamic injection 24h earlier. (B) similar assays as in A but performed with whole serum or fractionated HDL 24 and 48 h following hydrodynamic injections of 10μg of the indicated plasmid (C) SDS-PAGE and western blot analysis of HDL obtained from sera of mice treated with 10μg of pSushi-IL15-Apo or mock injected that were probed with polyclonal antibody against Apo A-I. The electrophoresis shift indicates the fusion protein of the expected molecular weight (53kD). (D) comparative analysis as in A using serum from mice treated with 10 μg indicated plasmids 48h prior to blood extraction.
Fig. S3: Time course follow-up of lymphocyte numbers in lung liver and spleen after pSushi-IL15-Apo liver gene transfer. Flow cytometry analysis of NK cells and CD8 T cells from the indicated organs. Two mice per group were sacrificed at each time point and data represent mean±SEM.
Fig. S4: Liver gene transfer of pSushi-IL15-Apo results in intense proliferation of NK and CD8 T lymphocytes.

*In vivo* proliferation of the indicated cell subsets assessed by bromodeoxyuridine (BrdU) incorporation. Mice were gene transferred with 1μg of pSushi-IL15-Apo. BrdU was given i.p. at days 0 and 1 and mice were sacrificed at day 3. Nuclear staining of BrdU on gated lymphocyte subsets was performed and data are presented as histograms. Data from a representative mouse of four mice per group are presented and mean±SEM is given for each experimental group.
Fig. S5: *In vivo* bioactivity of rSushi-IL15-Apo. The recombinant fusion protein at the indicated doses or control vehicle was given i.v. to C57Bl/6 mice (two mice per condition): Flow cytometry analyses on mononuclear leukocyte suspensions were performed to enumerate NK and memory CD8 T cells derived from spleen, liver and lungs.
Repeated hydrodynamic injections achieve similar effects. Mice naive or given 1 μg pSushi-IL15-Apo were studied for the relative abundance of the indicated lymphocyte subsets in peripheral blood four days following two sequential hydrodynamic injections given with an interval of 13 days.