## **Supplementary Material**

## IL-7-producing stromal cells are critical for lymph node remodeling



**Supplementary Figure 1:** Sorting strategy for LN stromal cells and post-sort quality control. CD45-depleted cell suspensions of 4 peripheral LNs pooled from 10 mice were stained for CD45, Pdpn and CD31 (A) and separated into for CD45<sup>-</sup> stromal cell subpopulations (B). Post-sorting purity control for LECs (C), and FRCs (D). In total, three independent sorting experiments were done. (E) RT-PCR analysis of IL-7 expression in lymphatic collecting vessels, artery or veins in the skin.



**Supplementary Figure 2:** Expansion of IL-7-expressing stromal cells during virus-induced LN remodeling. IL-7-CrexR26-EYFP mice were infected with 200 pfu LCMV-WE and transgene activity was determined on day 20 post infection. In situ analysis of naïve (A) and infected (B) IL-7-CrexR26-EYFP inguinal LNs showing the single channels for pdpn (red) and EYFP (green), scale bar =  $200 \mu m$ .



Reconstructing lymph nodes in renal capsule

**Supplementary Figure 3:** Avascular transplantation of inguinal LNs from IL-7-CrexR26-EYFP (here stained for EYFP<sup>+</sup>Pdpn<sup>+</sup> stromal cells and B220<sup>+</sup> B cell areas) under the kidney capsule leads to re-growth of LNs. Note that reconstructed LNs were fully connected to the vasculature.



**Supplementary Figure 4:** IL-7-Cre active LECs in regenerating LNs express LT $\beta$ R and RANK-L. (A) Sections of transplanted IL-7-CrexR26-EYFP LNs were stained for parenchymal stroma (Pdpn in blue channel), transgene expressing LECs (EYFP in green channel) and RANK-L (red channel). Scale bar = 10µm. (B) Sections of transplanted IL-7-CrexR26-EYFP LNs were stained for transgene expressing LECs (LyveI in blue channel and EYFP in green channel) and LT $\beta$ R (red channel). Scale bar = 30µm.