Gene	TaqMan Assay
IL23	Mm00518984_m1
IL17 (primer 1)	Mm00439618-m1
IL17 (primer 2)	Mm00439619-m1
SGLT2	Mm00453831_m1
rBAT	Mm00486218_m1
NKCC2	Mm00441424_m1
NCC	Mm00490213_m1
Nphs2 (Podocin)	Mm01292252-m1
AQP2	Mm00437575_m1
MCSF	Mm00432686-m1
IL-1β	Mm00434228-m1
GAPDH	Mm99999915_g1

Supplemental Table 1: TaqMan gene expression assays used in real-time PCR (all from Applied Biosystems)

Supplemental Figure legends

Supplemental Figure 1: Flow cytometry for neutrophils in the spleen

Panel A shows a representative scatter plot of flow cytometry analysis of CD45+ cells from THP+/+ and THP-/- spleens (n=5 per group), gated for CD11b and Ly6G. Quantitation of neutrophils (defined as CD45+, CD11b+, Ly6G+) is shown in panel B. Asterisk denotes statistical significance between THP+/+ and THP-/- ($p<0.05$).

Supplemental Figure 2: Gating strategy for bone marrow flow cytometry and analysis

Representative flow cytometry dot plots of bone marrow from THP+/+ and THP-/- mice are shown, along with the corresponding gating controls. The definitions of progenitor cells were discussed in details in the methods sections.

Supplemental Figure 3: Analysis of bone marrow cells using an automated hematology analyzer

Bar graphs are mean± standard error of various types of differentiated leukocytes in the bone marrow of THP+/+ and THP-/- mice, measured using a Hemavet analyzer (N=6 per group). Asterisk denotes statistical significance $p<0.05$ between groups.

Supplemental Figure 4: Flow cytometry for IL17 producing cells in the kidney

Panel A shows a representative flow cytometry analysis of CD45+ cells from THP+/+ and THP-/- kidneys (n=5 each group), gated for CD3 and IL-17. The percentages shown within the quadrants (orange, CD3+, IL-17+; Blue, CD3-, IL-17+) represent the group average ± standard error. Asterisk denotes statistical significance between THP+/+ and THP-/- ($p<0.05$). Panel B shows the percentage of neutrophils (defined as CD11b hi, Ly6G+) within CD3-, IL17+ cells.

Supplemental Figure 5: Laser Micro-dissection (LMD) of S3 segments and Thick ascending limbs (TAL)

Panels A and B show LMD of S3 and TAL segments in the kidney, respectively. Verification of the purity of the RNA extracted from each segments was performed using real-time PCR probing for tubular markers expressed only in specific nephron segments: SGLT2 for S1 and S2 segments; rBAT for S3 segments, NKCC2 for TAL, NCC for distal tubules, and Aquaporin 2 (AQP2) for collecting ducts. Total kidney RNA was used as positive control and set as reference Asterisk denotes statistical significance from total kidney ($p<0.05$). The representative data shown is from THP-/- kidneys, and identical results were obtained in THP+/+.

Supplemental Figure 6: Immuno-Fluoresence LMD (I-LMD) of glomeruli and S1-S2 segments.

Panels A-C and E-G show I-LMD of a glomerulus and S1-S2 segments from the kidney cortex, respectively. Nuclei were stained blue with DAPI; S1-S2 segments were identified using Oregon green-phalloidin (green brush border stain, E and F). As a positive control, we performed real time PCR on the extracted RNA for podocin (glomerulus specific, panel D) and SGLT2 (S1-S2 specific, panel H). Asterisk denotes statistical significance compared to total kidney used as reference. The representative data shown is from THP-/- kidneys, and comparable results were obtained in THP+/+.

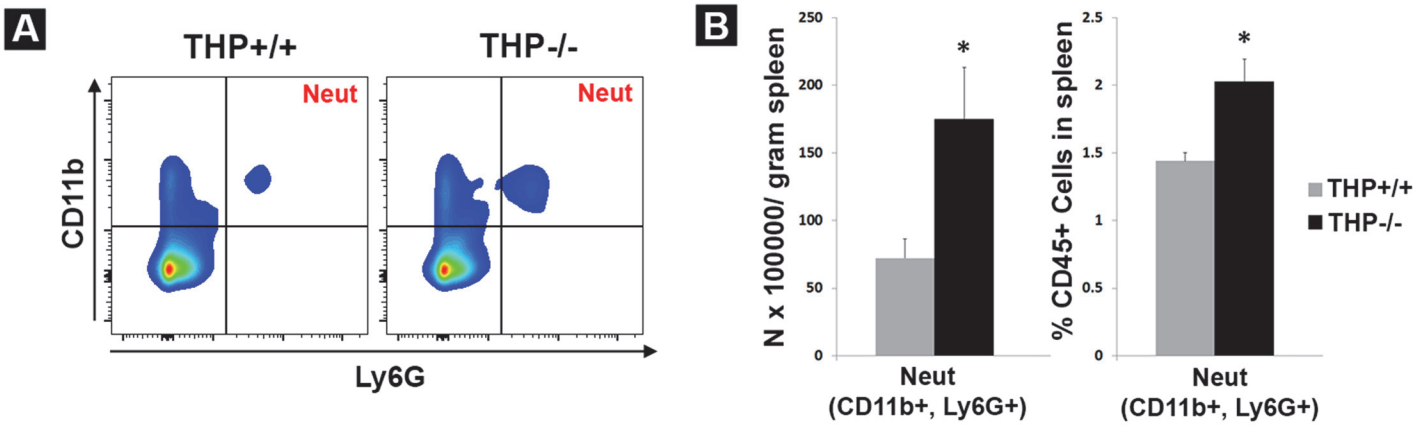
Supplemental Figure 7: Gating strategy for FACS

Representative dot plots for the gating strategy used to sort macrophages/dendritic cells (Mφ/DC) and T cells are shown. Mφ/DC were defined as CD45+, CD11b+, Ly6G-. T cells were defined as CD45+, CD11b-, CD3+, B220-

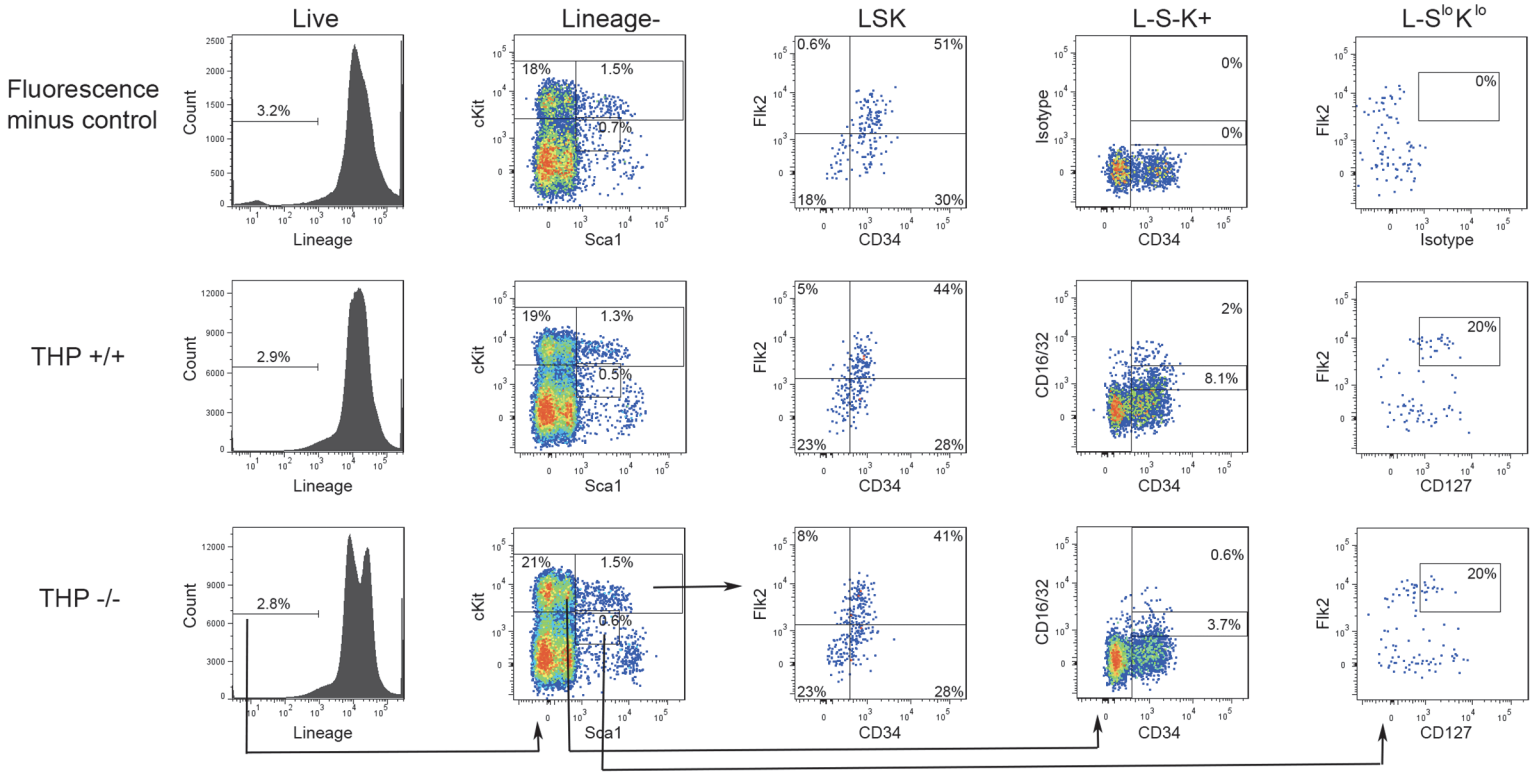
Supplemental Figure 8: Controls for the LMD-FACS procedures

Panels A and B show real-time PCR for IL1β and MCSF (respectively) performed on RNA extracted from S3 and TAL (obtained using LMD); Mφ/DC and T cells (obtained using FACS). Total kidney was used as positive control and set as reference. Asterisk denotes $P<0.05$ compared to total kidney, suggesting that the particular cell type is a major source of the corresponding cytokine or growth factor.

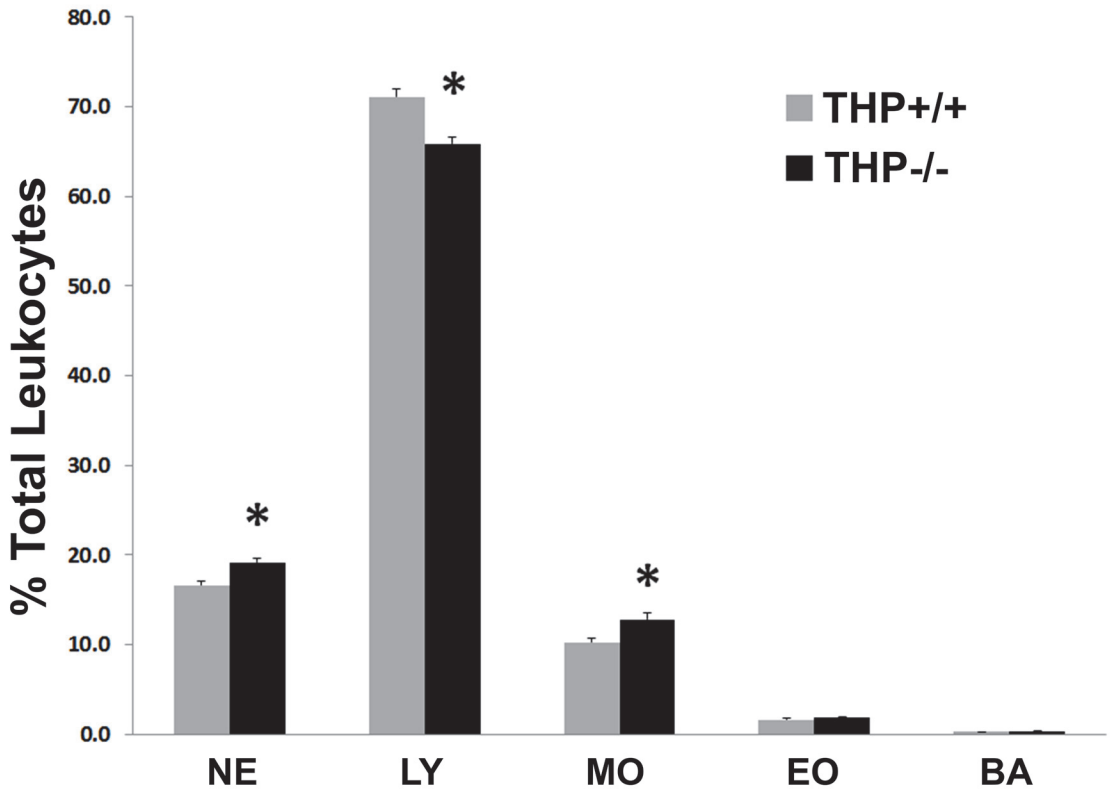
Supplemental Figure 1



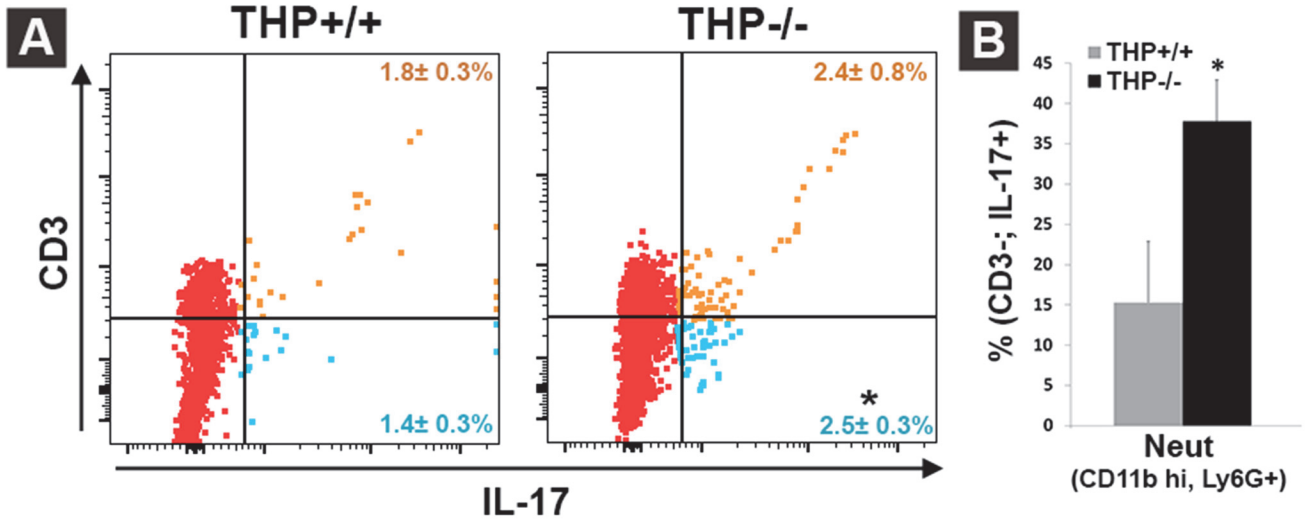
Supplemental Figure 2



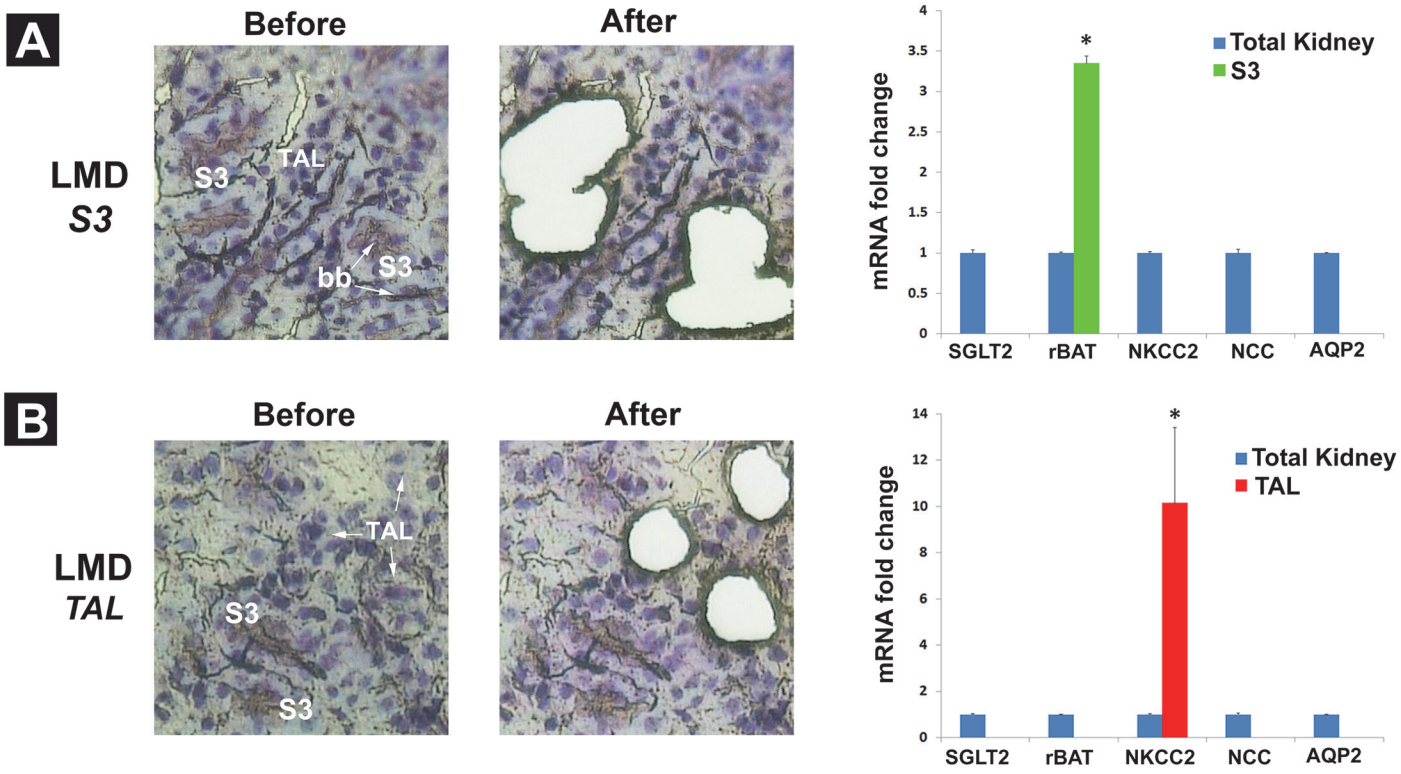
Supplemental Figure 3



Supplemental Figure 4



Supplemental Figure 5



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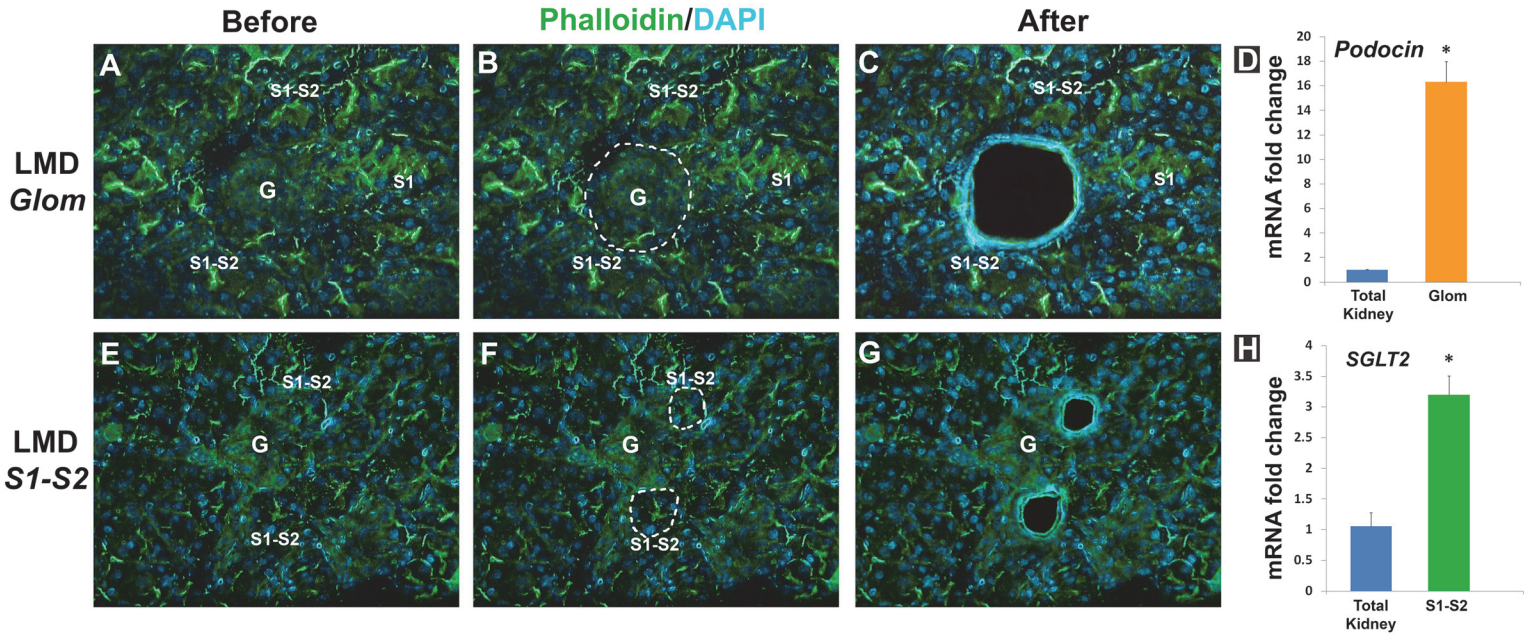
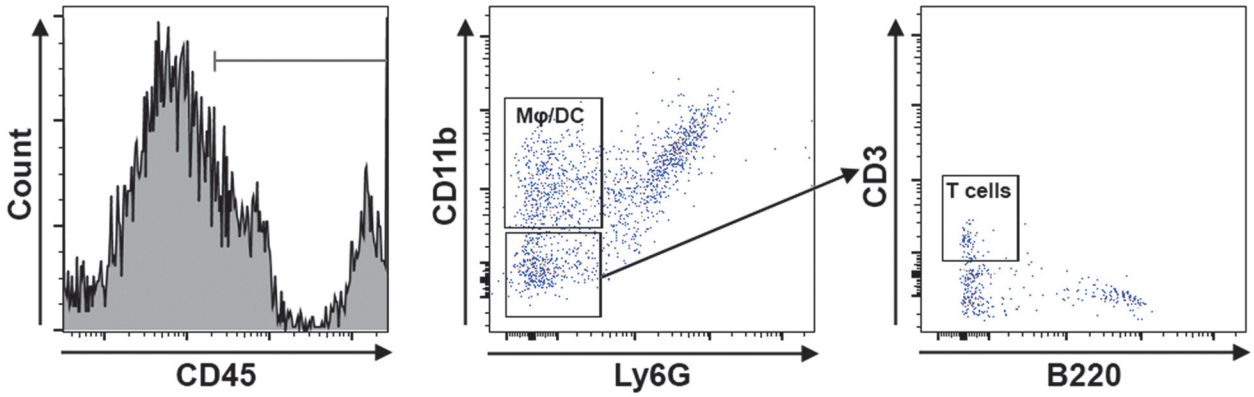
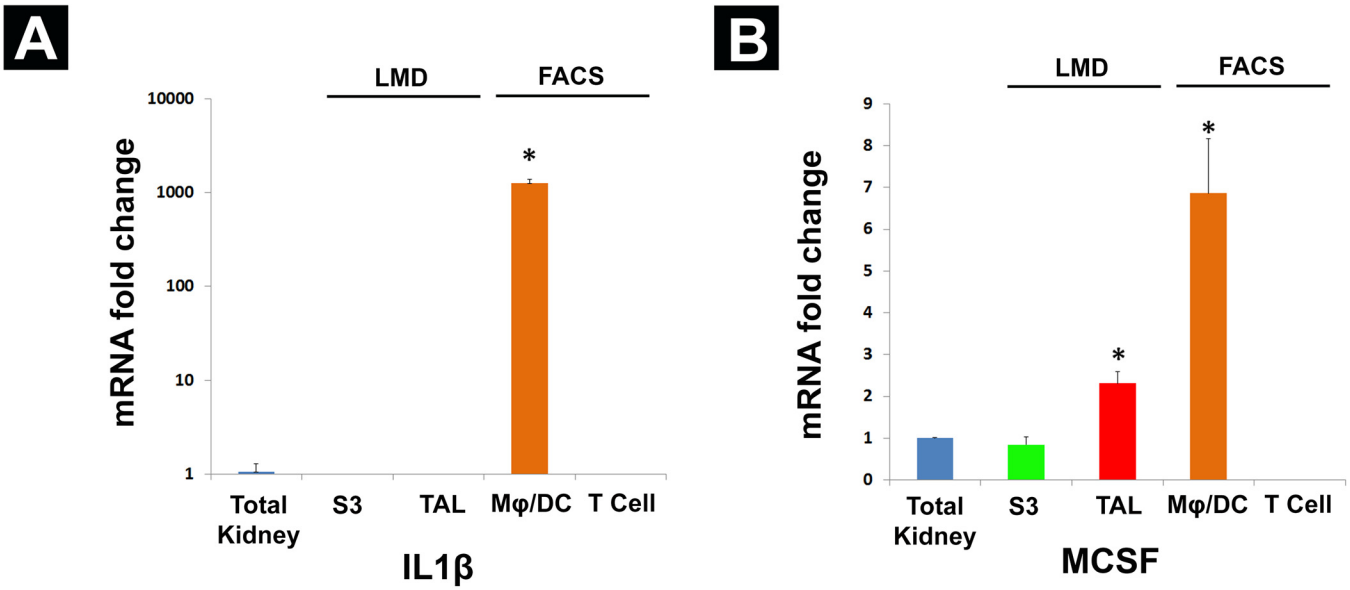


Supplemental Figure 7



Supplemental Figure 8