



Renal inflammatory cell infiltration was analysed in infected WT and *C5ar2^{-/-} mice* at 24hpi by flow cytometry. Stepwise gating strategy used in flow cytometric analysis of leukocytes (CD45⁺), neutrophil (CD45⁺Ly6G⁺), monocyte/macrophage (Ly6G⁻CD11b⁺) and Ly6C^{hi} and Ly6C^{lo} monocyte/macrophage in kidney tissues.

sFigure 2. Intrarenal HMGB1 and cleaved caspase-1 in *WT* and *C5ar1^{-/-}* mice following inoculation with UPEC



(A) Intrarenal protein levels of HMGB1 in WT and $C5ar1^{-/-}$ mice at 6phi and 24phi, determined by ELISA. Data were analyzed by Two-way ANOVA with multiple comparisons test (n=10 mice/group). (B) Representative Western blots showing cleaved caspase-1 and β -actin in kidney tissue lysates form WT and $C5aR1^{-/-}$ mice (i.e. uninfected [normal] and infected [24phi]). (C) Relative amount of cleaved caspase-1, corresponding to the groups of mice in B, quantified as described in Materials and methods. Data were analyzed by Unpaired 2-tailed Student's t test (n= 3-6 mice/group, pooled from two experiments). Error bars represent standard deviation. ns, no significant difference.



sFigure 3. Intrarenal inflammatory signals in *WT* and *C5ar1^{-/-}* mice following inoculation with UPEC

(A) Representative Western blots showing total and phosphorylated (p)-AKT, p-ERK, p-JNK, p-IkB, and β -actin in kidney tissue lysates from WT and *C5ar1*^{-/-} mice (i.e. uninfected [normal] and infected [24phi]). (B) Relative amounts of phosphorylated proteins, corresponding to the groups of mice in **A**, quantified as described in Materials and methods. Data were analyzed by Unpaired 2-tailed Student's t test (n= 3-6 mice/group, pooled from two experiments).

sFigure 4. Most renal infiltrating leukocytes are CD11b⁺ cell



Renal inflammatory cell infiltration was analysed in infected WT mice at 24hpi. Flow cytometry analysis revealed that the majority (>60%) of renal infiltrating leukocytes were CD11b⁺ cells following the inoculation in this model.



PCR analysis of tail genomic DNA from WT and $C5ar2^{-/-}$ mice (n=6 from 2 breeding pairs). PCR was performed using two pairs of primers for C5aR2 and *neomycin*. The agarose gel shows negative detection of C5aR2 and positive detection of neomycin in $C5ar2^{-/-}$ mice, whereas positive detection of C5aR2 and negative detection of neomycin in *WT* mice, thus confirming C5aR2 gene knockout in $C5ar2^{-/-}$ mice. Marker: 100 bp DNA ladder. sFigure 6. Absence of *C5aR2* expression in kidney tissue and peritoneal cells of *C5ar2^{-/-}* mice



RT-PCR analysis of C5aR2 mRNA in normal kidney tissue and peritoneal cells of WT and *C5aR2*^{-/-} mice. Peritoneal cells were prepared from peritoneal exudate cells d1 or d3 after (i.p) injection of 1mL of Thioglycolate. The agarose gel shows positive detection of C5aR2 expression in kidney tissue and peritoneal cells of WT mice but negative detection in *C5aR2*^{-/-} mice. GAPDH, used as an internal control in RT-PCR. Marker: 100 bp DNA ladder. PCR primer sequences are given in Materials and methods.