Supplemental Figure 1

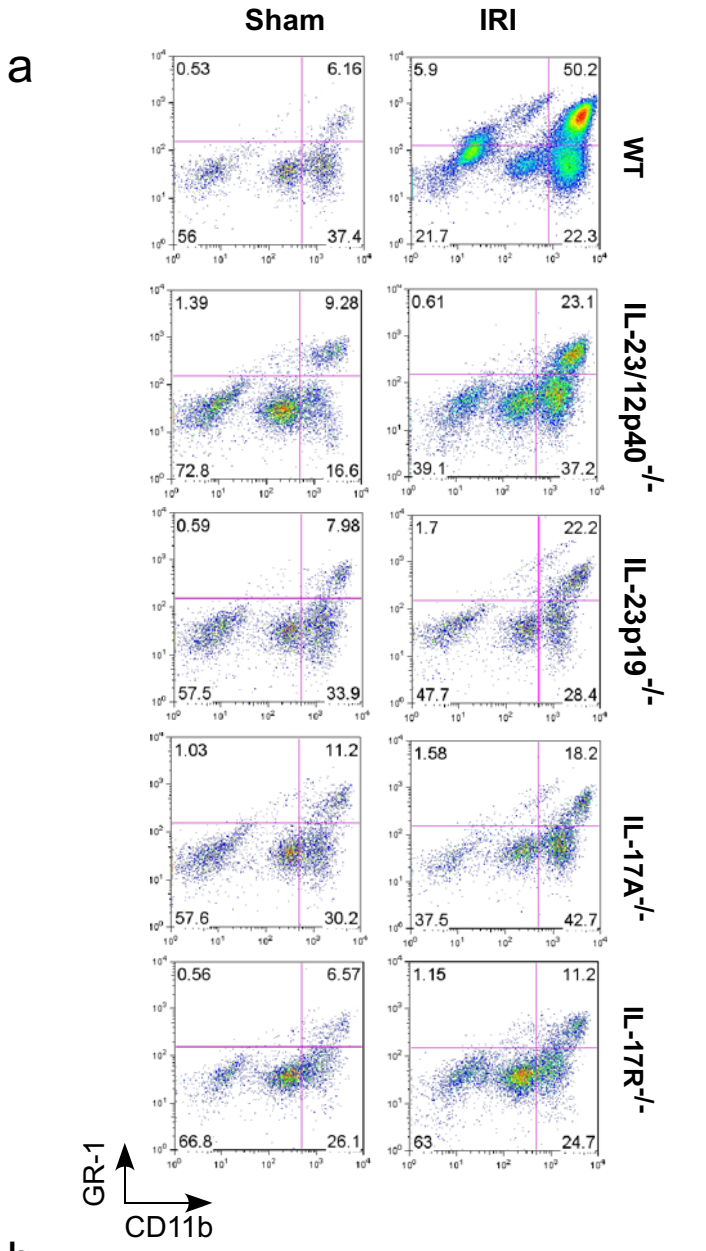

Figure S1. Recruited CD11b+GR-1+ neutrophils were detected by FACS in kidneys of WT, IL-23/12p40$^{-/-}$, IL-23p19$^{-/-}$, IL-17A$^{-/-}$ and IL-17R$^{-/-}$ sham and IRI mice. Data shown in (a) are representative of more than three experiments. (b) Kidney Cd11b+GR-1+ neutrophil cell number was calculated as described in Materials and Methods. There was significant neutrophil infiltration in kidneys of WT IRI mice compared with IL-23/12p40$^{-/-}$, IL-23p19$^{-/-}$, IL-17A$^{-/-}$ and IL-17R$^{-/-}$ mice (N=3-5; ***, P<0.001).

Supplemental Figure 2

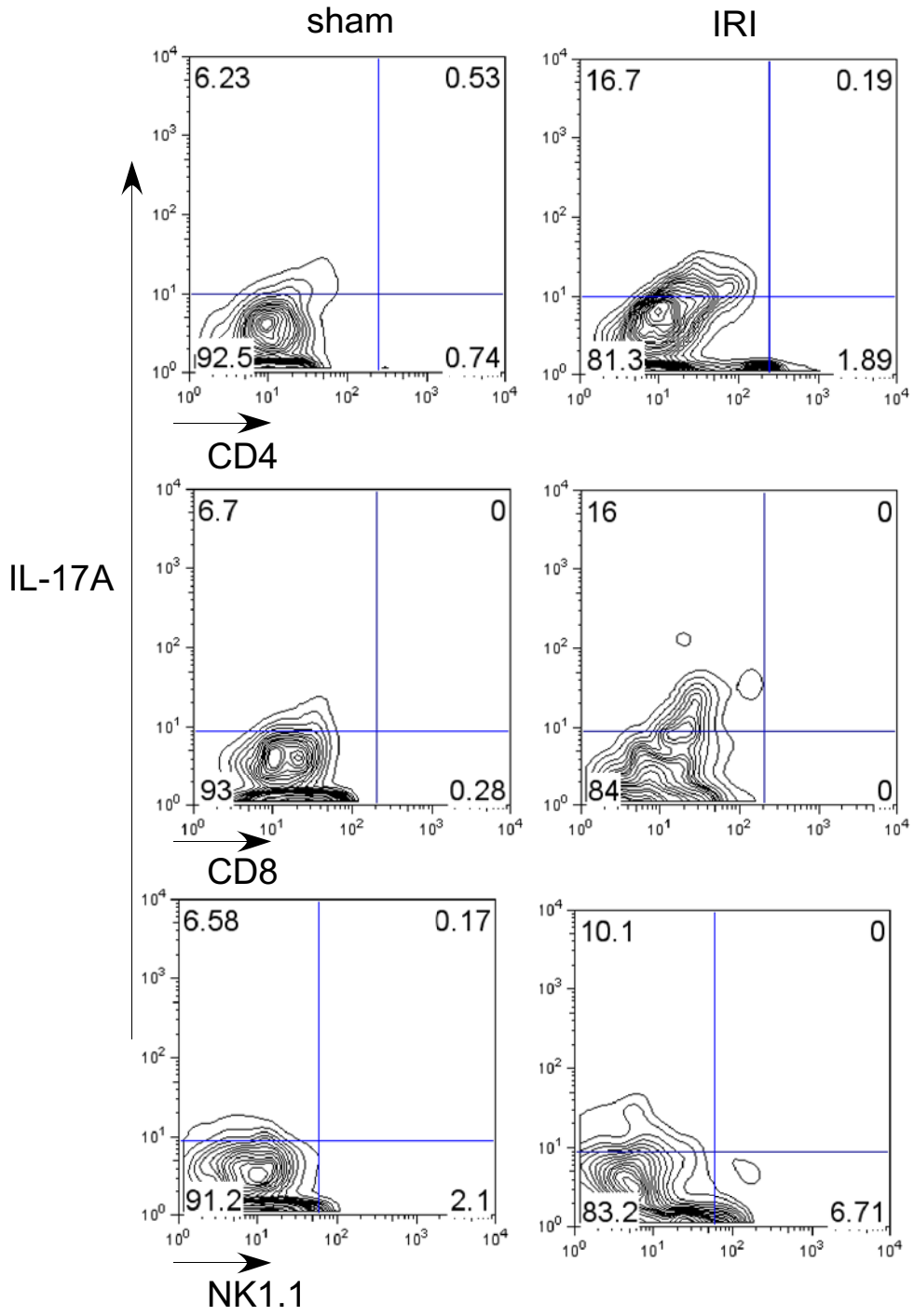

Figure S2. IL-7A is not produced by CD4 or CD8 T cells or by NK1.1^{-} NK cells. Identification of IL-17A-secreting cells in kidneys 3 h after sham or IRI. Mouse kidney CD45+ cells were re-stimulated with PMA and ionomycin, and the secreted form of IL-17A was measured as described in Materials and Methods. Cells that were labeled as CD45+7AAD- and CD4+, CD8+, or NK1.1+ were used to detect IL-17A secretion from CD4+ or CD8+ T cells or NK1.1+ NK cells by FACS. Representative data from one of three experiments are shown.

Supplemental Figure 3

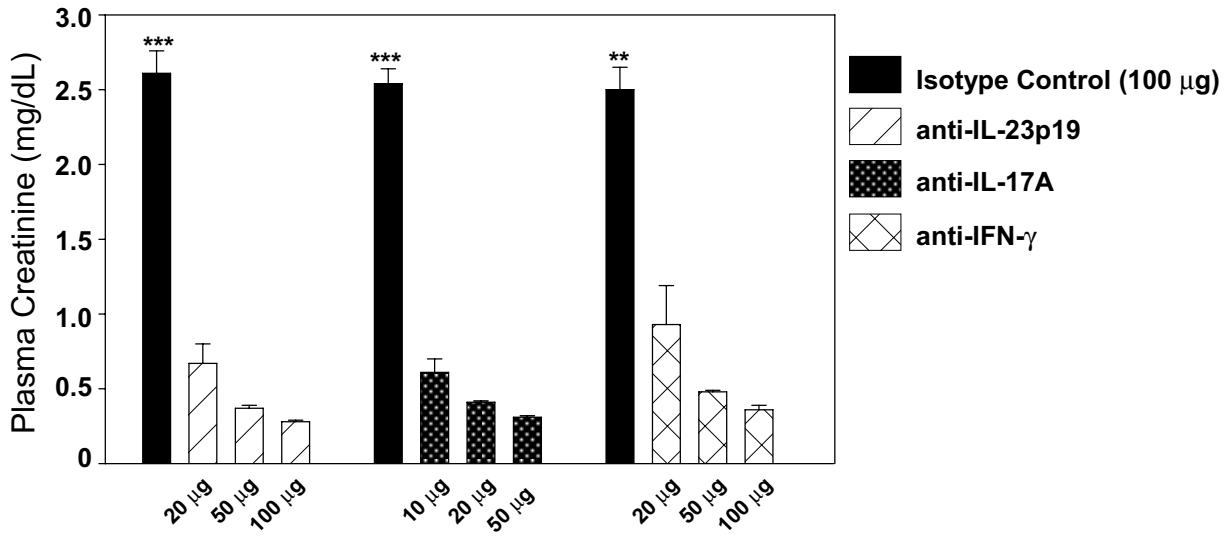

Figure S3. Evaluation of optimal dose of neutralization antibodies. WT mice were treated (i.v.) with anti-IL-23p19, anti-IL-17A or anti-IFN-γ neutralization antibodies 18 h prior to the kidney IR surgery. Separate groups of mice were given the highest dose of the respective isotype controls, IgG1 or IgG2a (100 g) (see Materials and Methods) at the same time. Plasma creatinine was determined as a measure of kidney function after 24 h of kidney reperfusion. **, P<0.01 or ***, P<0.001, compared with mAb treated IRI mice.

Supplemental Table 1. Acute tubular necrosis (ATN)[A] scores in mouse kidneys after sham operation or 24 h after kidney ischemia-reperfusion injury.

Mice	Sham	IRI
WT	0.15 ± 0.05(3)	4.10 ± 0.21(3)
IL-23/12p40$^{-/-}$	0.13 ± 0.03(3)	0.19 ± 0.08(5)*
IL-23p19$^{-/-}$	0.23 ± 0.03(3)	0.80 ± 0.18(6)*
IL-17R$^{-/-}$	0.22 ± 0.03(6)	0.34 ± 0.06(7)*
IL-17A$^{-/-}$	0.30 ± 0.10(3)	0.33 ± 0.39(3)*
IL-12p35$^{-/-}$	0.12 ± 0.02(3)	0.32 ± 0.14(3)*
IFN-$\gamma^{-/-}$	0.21 ± 0.04(4)	0.42 ± 0.11(4)*

[A]Degree of morphological damage in kidney outer medulla is scored on a scale of 0-5 (5, highest injury) as described in Methods.

Sham, sham-operated mice. IRI, 28 min kidney ischemia followed by 24 h reperfusion.

*, $P < 0.001$ compared to WT IRI mice; Values are mean ± SE; numbers in parentheses, n.

Supplemental Table 2. Cytokine and chemokine expression[A] in WT and IFN-$\gamma^{-/-}$ mouse kidneys 6 h after ischemia-reperfusion injury[B]

	WT	IFN-$\gamma^{-/-}$
Genes		
IL-6	27.36 ± 3.91(3)	1.50 ± 0.17(4)***
TNF-α	11.58 ± 3.13(5)	1.42 ± 0.10(4)*
CXCL1	123.98 ± 37.51(4)	0.74 ± 0.20(4)**
CXCL2	4.18 ± 0.67(4)	0.26 ± 0.06(4)***

[A]Relative mRNA expression; values are fold expression (mean ± SE) relative to sham; numbers in parentheses, n.

[B]Mouse kidneys were exposed to sham operation or 28 min ischemia followed by 6 h reperfusion.

*, $P < 0.05$; **, $P < 0.01$; ***, $P < 0.001$ compared to WT IRI mice.