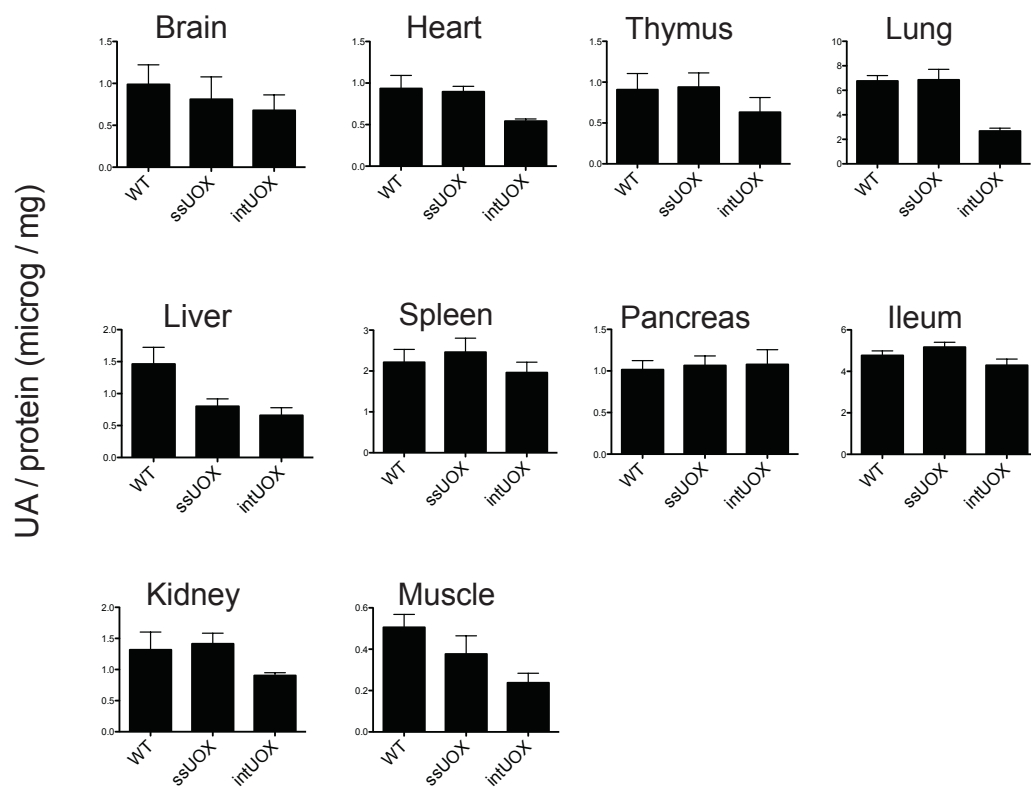
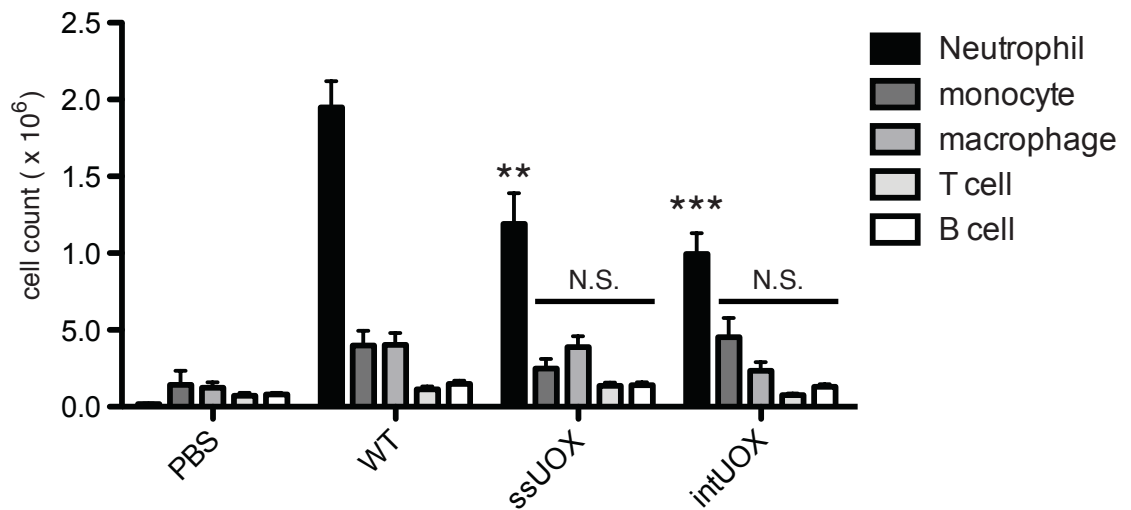


Supplementary Figure 1



Uric acid concentrations in the organs of uricase transgenic mice. Uric acid concentration was measured in the tissue lysates obtained from the indicated organs from uricase transgenic mice or wild type littermate (n = 5). Uric acid concentration was normalized with protein concentration.

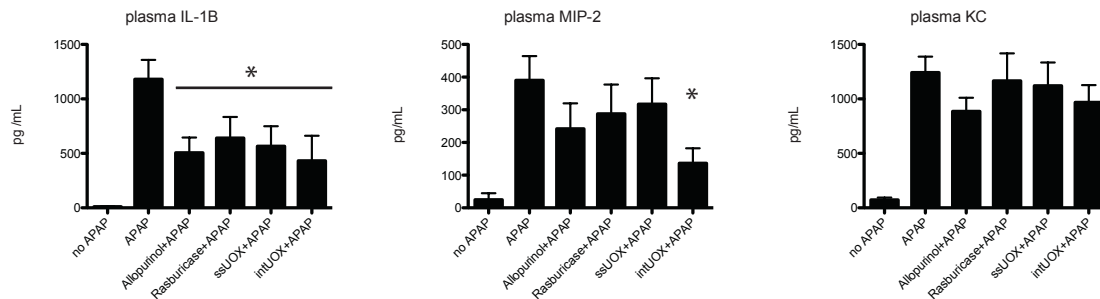
Supplementary Figure 2



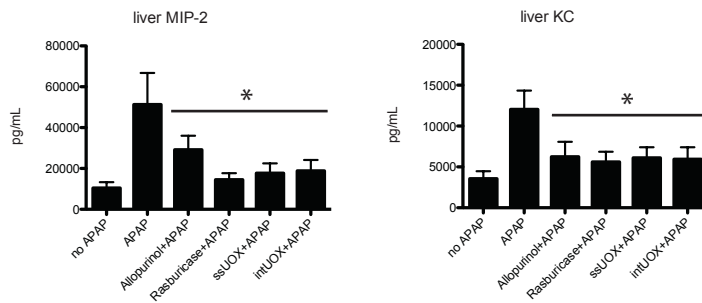
Total cell numbers in Acetaminophen treated liver in uricase Tg mice. Mice were treated with 300 mg/kg of Acetaminophen i.p. and livers were harvested 18 hours later. Non parenchymal cells of the liver were isolated by collagenase digestion followed by gradient centrifugation. Absolute number of the cells were measured by flow cytometry equipped with high throughput sampler. Number of mice used in n = 13 (PBS), 13 (WT), 12 (ssUOX) and 14 (intUOX). Means and s.e.m. values are for combined data from 3 independent experiments. ***P<0.001, **P<0.01, N.S., not significant versus WT mice with APAP treatment with One way ANOVA with Dunnett's multiple comparison test.

Supplementary Figure 3

A

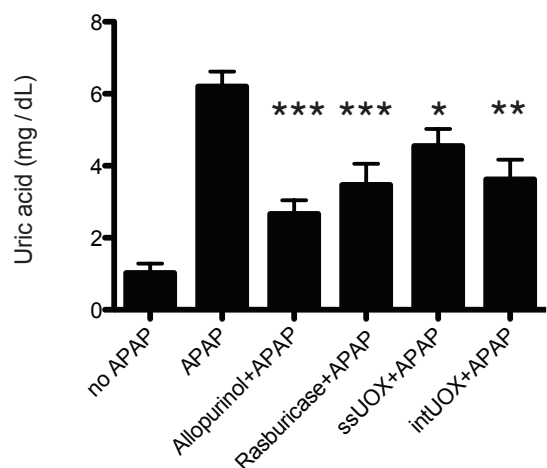


B



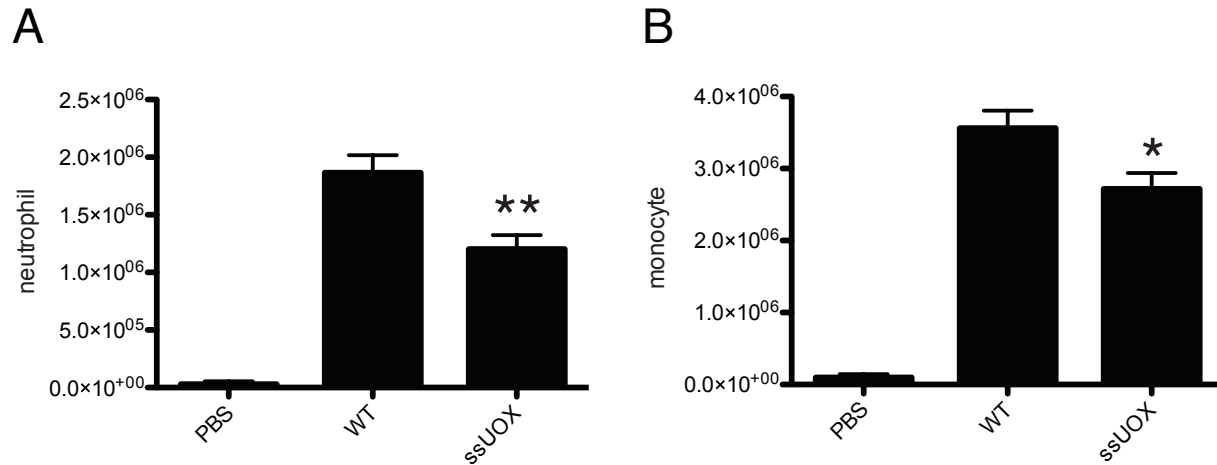
Cytokine and chemokine concentrations in plasma (A) and liver (B) liver of Acetaminophen treated mice. WT C57 BL/6 with Allopurinol or Rasburicase treatment, or UOX Tg mice were challenged with 300 mg/kg of Acetaminophen. Blood and liver were obtained 18 hours later. Means and s.e.m. values are for combined data from 2 or more independent experiments. * $P < 0.05$ versus WT mice with APAP treatment with One way ANOVA with Dunnett's multiple comparison test.

Supplementary Figure 4



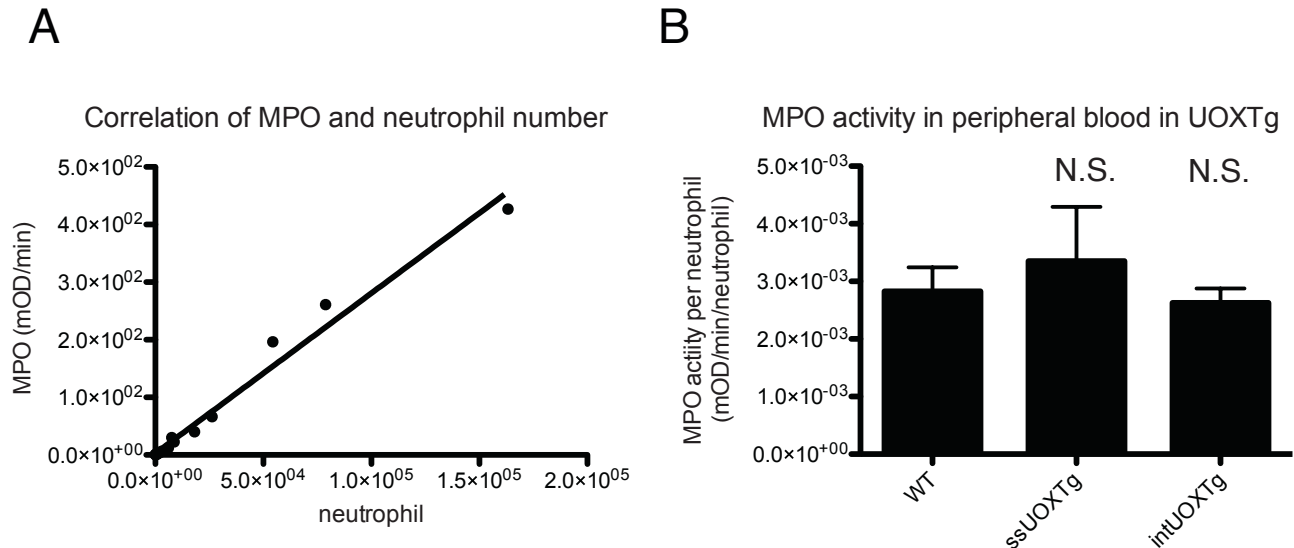
Uric acid concentration in liver of Acetaminophen treated mice. WT C57 BL/6 with Allopurinol or Rasburicase treatment, or UOX Tg mice were challenged with 300 mg/kg of Acetaminophen. Blood and liver was obtained 18 hours later. n=15 each. ***P<0.001, **P<0.01, *P<0.05, N.S., not significant versus WT mice with APAP treatment with One way ANOVA with Dunnett's multiple comparison test.

Supplementary Figure 5



Reduced neutrophil recruitment in the peritoneal cavity in response to necrotic EL4 cells in ssUOX transgenic mice. Total neutrophil (A) or monocyte (B) numbers in the peritoneal cavity 15 h after i.p. challenge with necrotic EL4 cells. Negative control: C57BL/6 mice challenged with PBS. Means and s.e.m. values are for combined data from three independent experiments. Number of mice used in n = 4(PBS), 22 (WT) and 14 (ssUOX). **P < 0.01, *P < 0.05., versus WT.

Supplementary Figure 6



(A) Correlation of MPO activity with neutrophil number. C57 BL/6 mice were injected i.p. with 0.5mg of Zymosan and the peritoneal lavage was obtained 15 hours later (n = 3). The lavage was separated and measured for neutrophil number and MPO activity. Linear regression of correlation showed that the r^2 value of 0.9790 ($P < 0.0001$). (B) MPO activity of neutrophils in UOX Tg mice. Neutrophils from peripheral blood of WT of UOX Tg mice were obtained and measured for MPO activity (n=5 each). N.S., not significant versus WT mice with One way ANOVA with Dunnett's multiple comparison test.