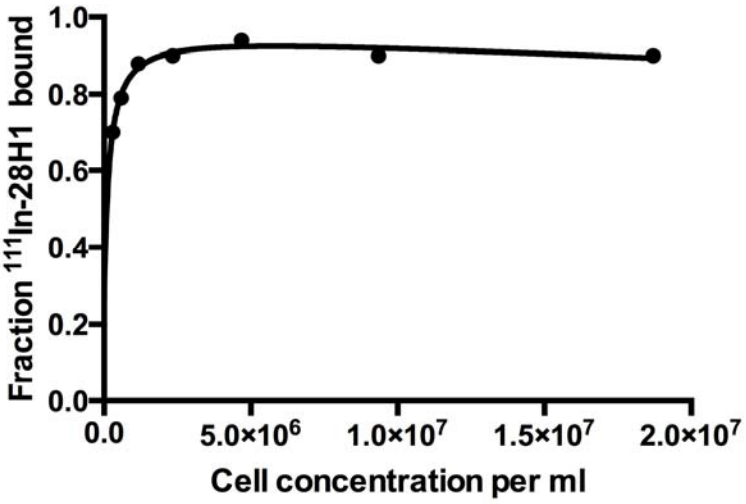
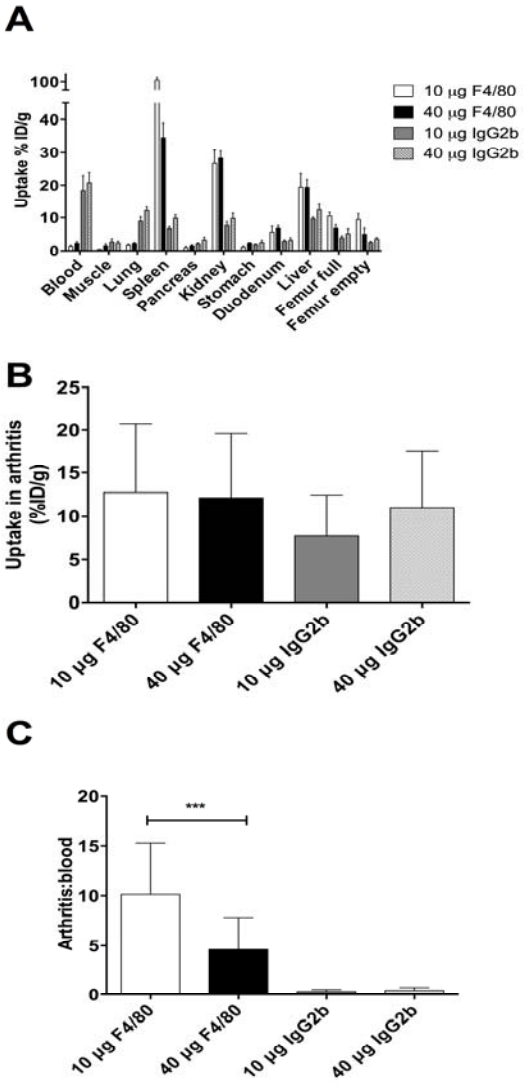


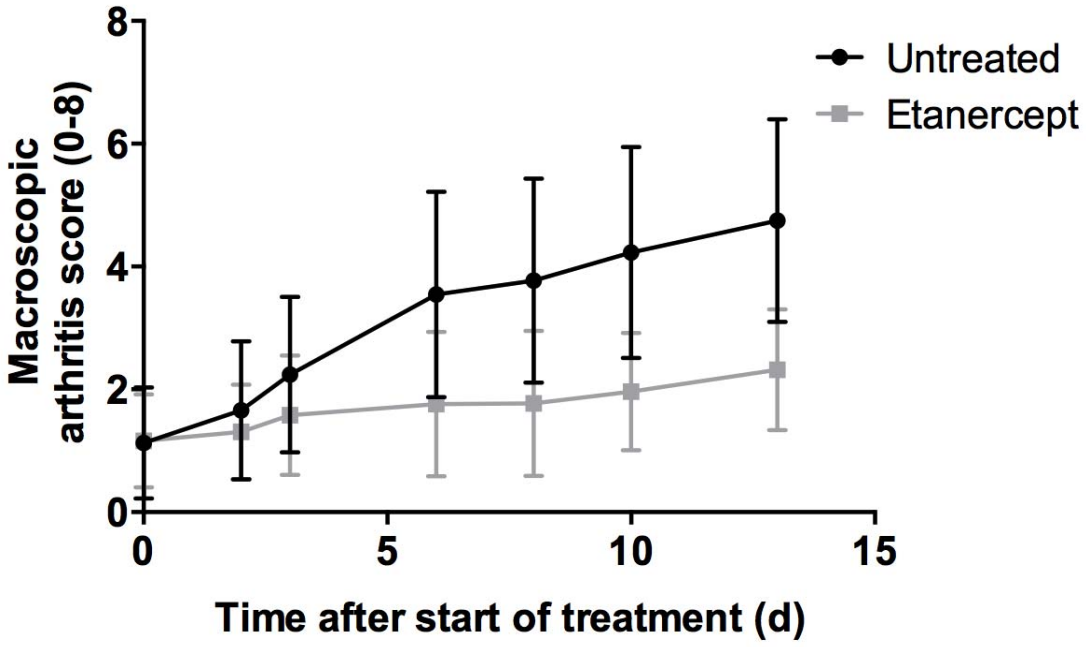
Supplemental Figure 1.

Binding plot of ^{111}In-28H1 to HEK-293 human embryonic kidney cells overexpressing FAP. In brief, cells (serially diluted; 800 μl total) were incubated with ^{111}In-28H1 (100.000 CPM/tube) for 60 minutes at 37 °C. Cells were then pelleted by centrifugation and the amount of activity bound to the cells was calculated.



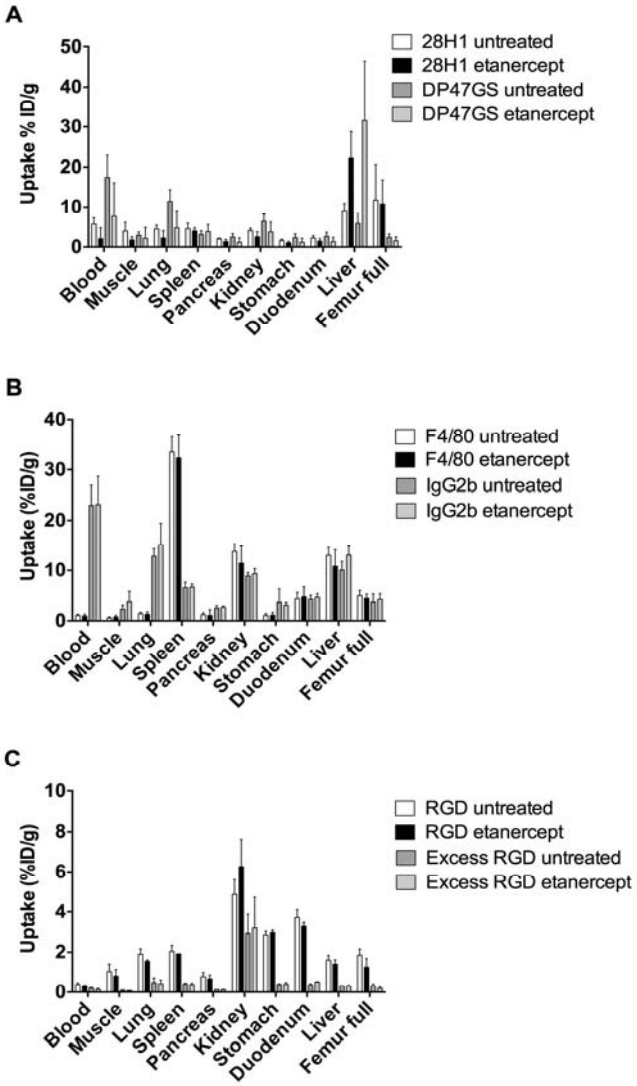
Supplemental Figure 2.

Dosing study ^{111}In-anti-F4/80, ^{111}In-ratIgG2b. General biodistribution of tracers at 10 or 40 µg dose in arthritic mice at 24 h (A). Uptake in arthritic joints (B) or expressed as arthritis:blood ratios (C). Data are average ± standard deviation (n=4-5 mice/group). ***($p \leq 0.001$).



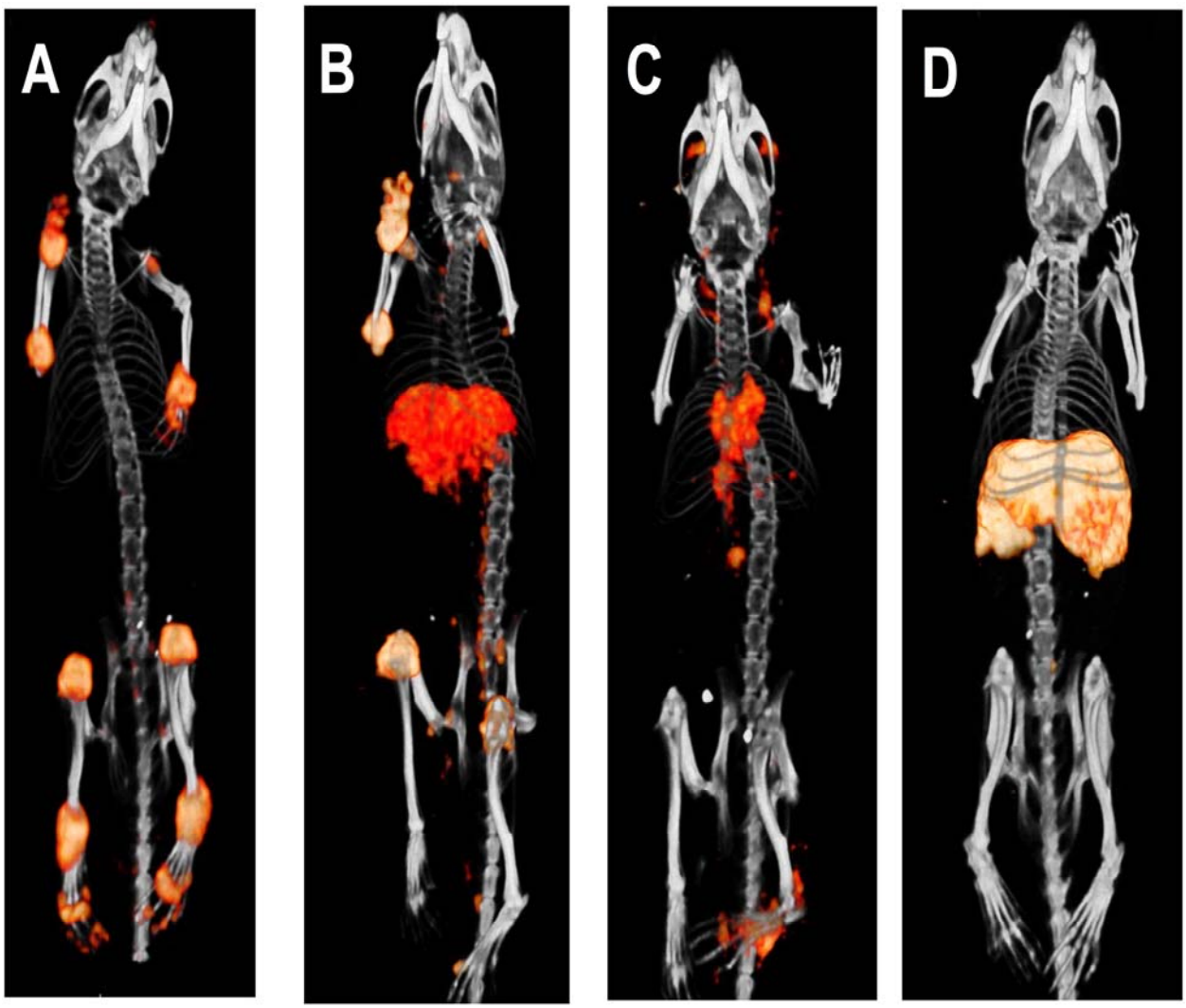
Supplemental Figure 3.

Effect of etanercept on murine collagen-induced arthritis score with time. Data are average ± standard deviation. Due to staggering the induction of RA in mice, the number of mice/time point/group was 22 for the first two measurements, 33 for the 3rd, and 44 for the 4th measurement onwards. Mice were injected with tracers at the last time point. Imaging and biodistribution experiments with tracers were carried out at 13-15 days after start of treatment. 2-way ANOVA showed the difference between untreated/Etanercept is significant (interaction $p<0.0001$).



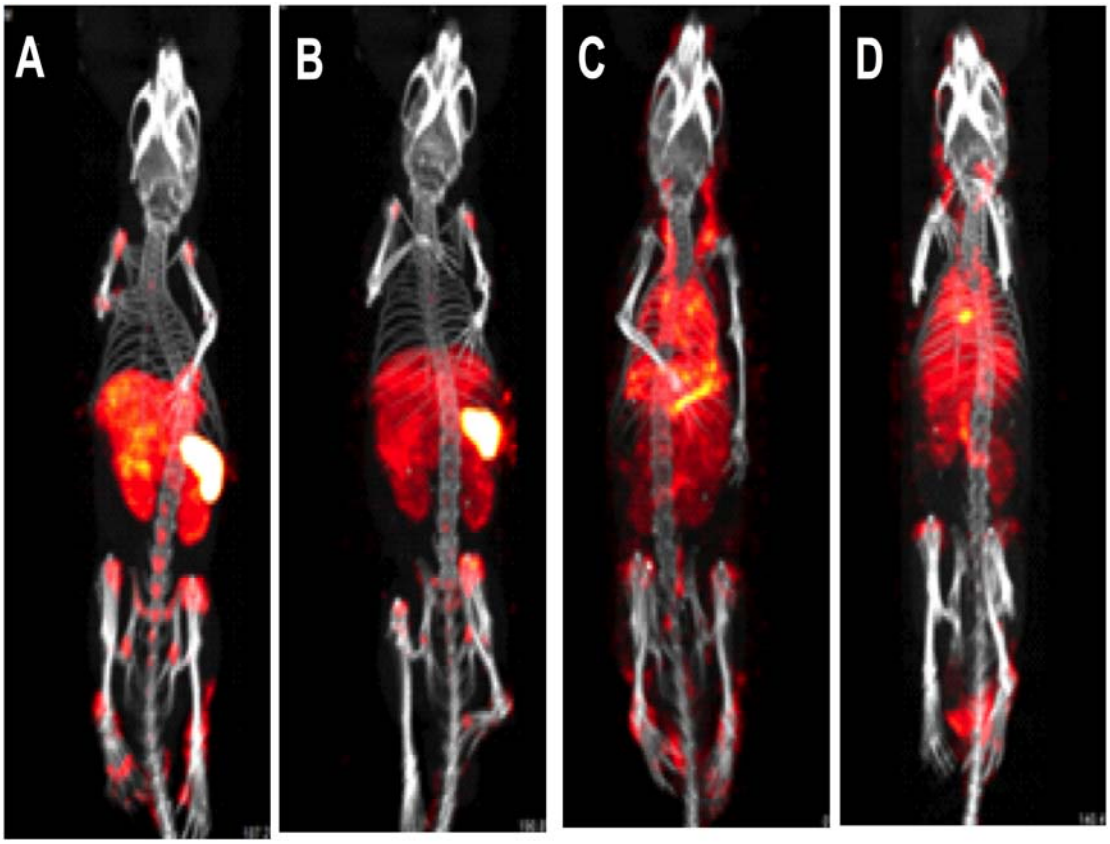
Supplemental Figure 4.

Joint uptake of tracers in untreated or etanercept-treated CIA mice at 48 h (^{111}In-28H1, ^{111}In-DP47GS; A), 24 h (^{111}In-anti-F4/80, ^{111}In-ratIgG2b; B) and 1 h p.i. (^{111}In-RGD_2 with/without excess unlabeled; C). Data are average ± standard deviation (n=7-10 mice/group (A, B) or 2 mice/group (C).



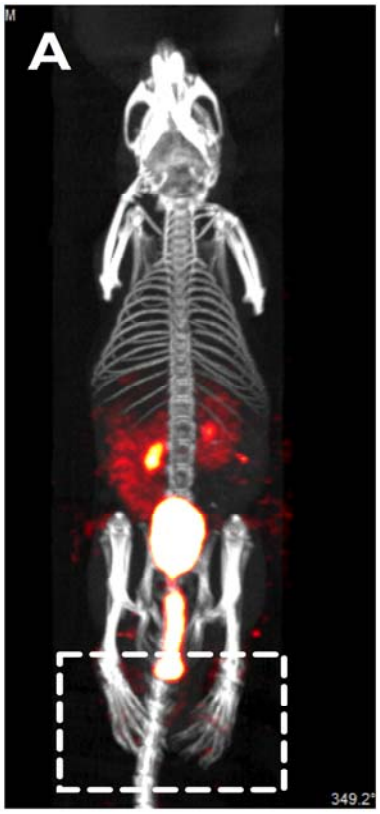
Supplemental Figure 5

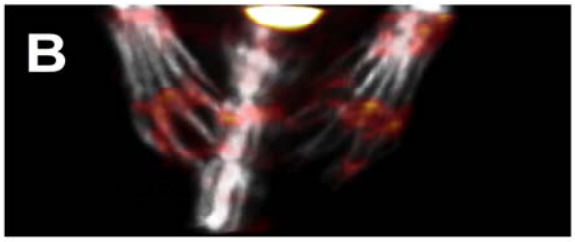
3D SPECT/CT scans of untreated (A, C) and etanercept-treated (B, D) CIA mice 48 h p.i. of ^{111}In-28H1 (A-B) and ^{111}In-DP47GS (C-D). All images are scaled equally.



Supplemental Figure 6

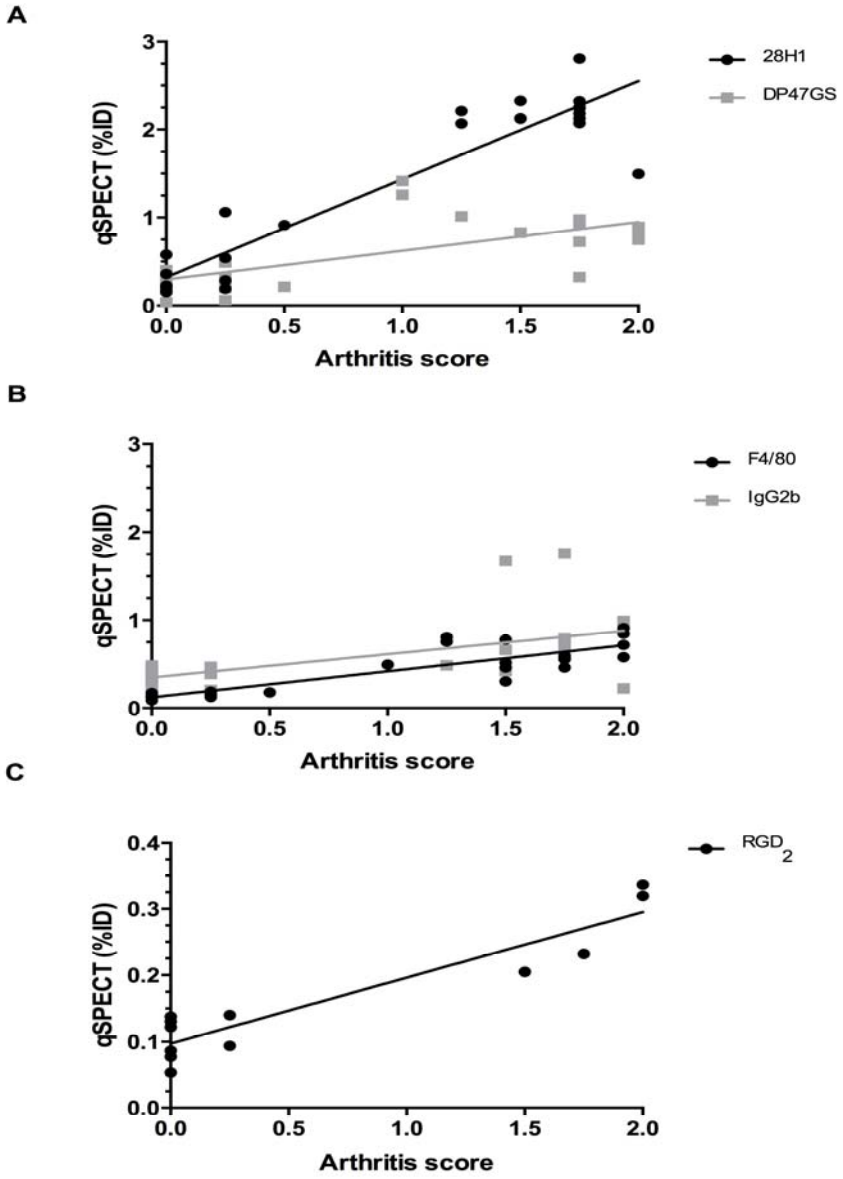
3D SPECT/CT scans of untreated (A, C) and etanercept-treated (B, D) CIA mice 24 h p.i. of ^{111}In-anti-F4/80 (A-B) and ^{111}In-ratIgG2b (C-D). All images are scaled equally.





Supplemental Figure 7

3D SPECT/CT scans of untreated CIA mice 1 h p.i. of ^{111}In-RGD$_2$ (A-B). Panel B is a cropped version of Panel A, with higher windowing.



Supplemental Figure 8

Joint uptake as measured by quantitative SPECT of tracers in untreated or etanercept-treated CIA mice at 48 h (^{111}In-28H1, ^{111}In-DP47GS; A), 24 h (^{111}In-anti-F4/80, ^{111}In-ratIgG2b; B) and 1 h p.i. (^{111}In-RGD_2; C). Data are of individual joints (n=3-6 mice/group, 4 joints/mouse). Slopes are as follows: A: 28H1: 1.11 ± 0.09 and DP47GS: 0.33 ± 0.07; B: F4/80: 0.30 ± 0.04 and IgG2b: 0.26 ± 0.08; C: 0.10 ± 0.01.