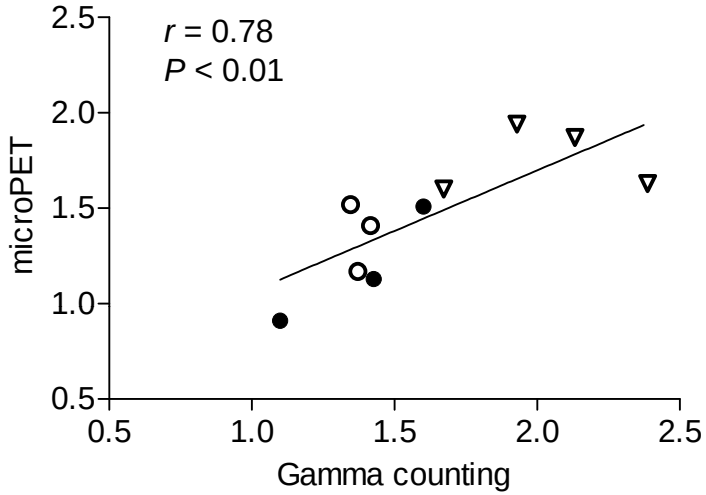
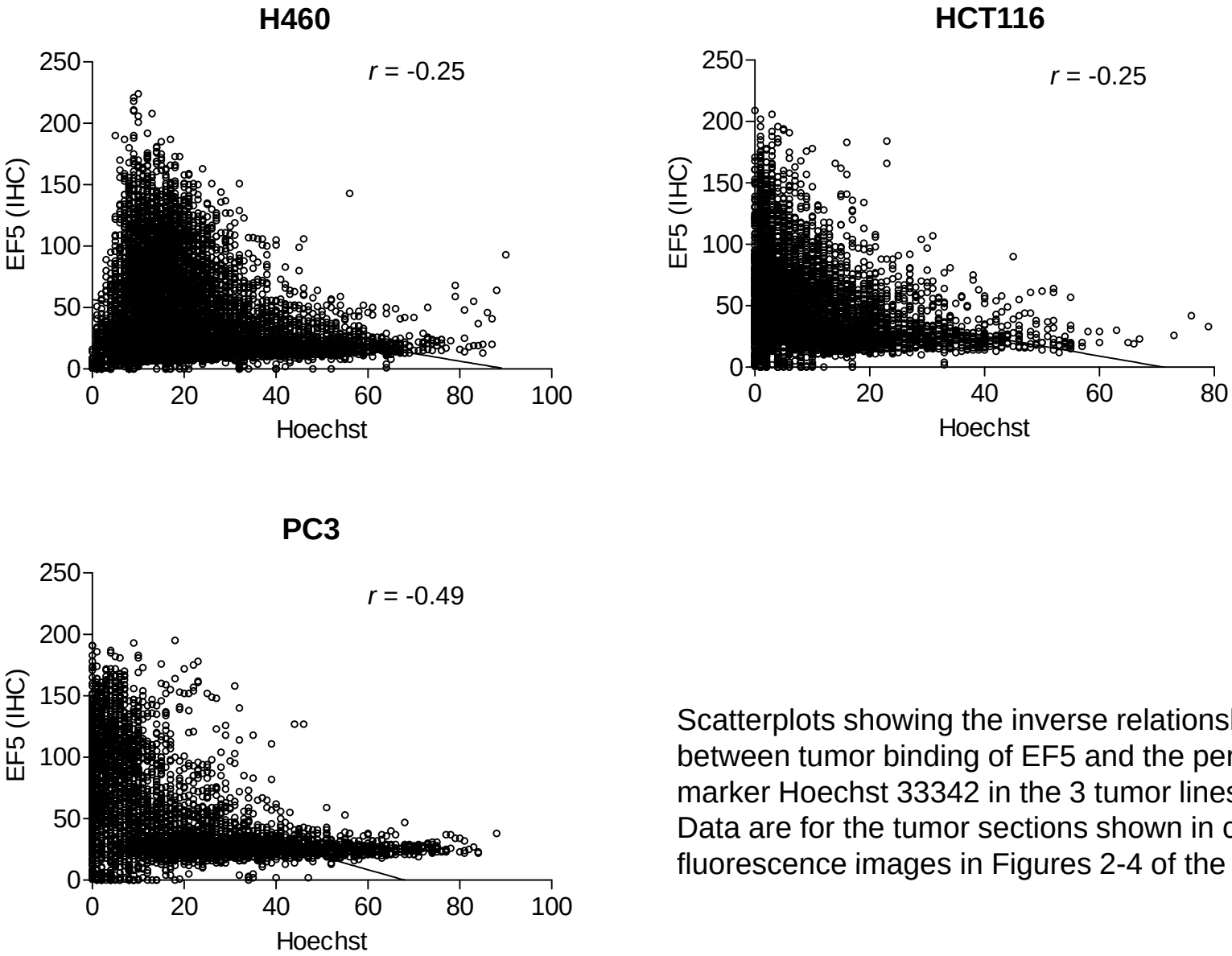
Supplemental Fig. 1



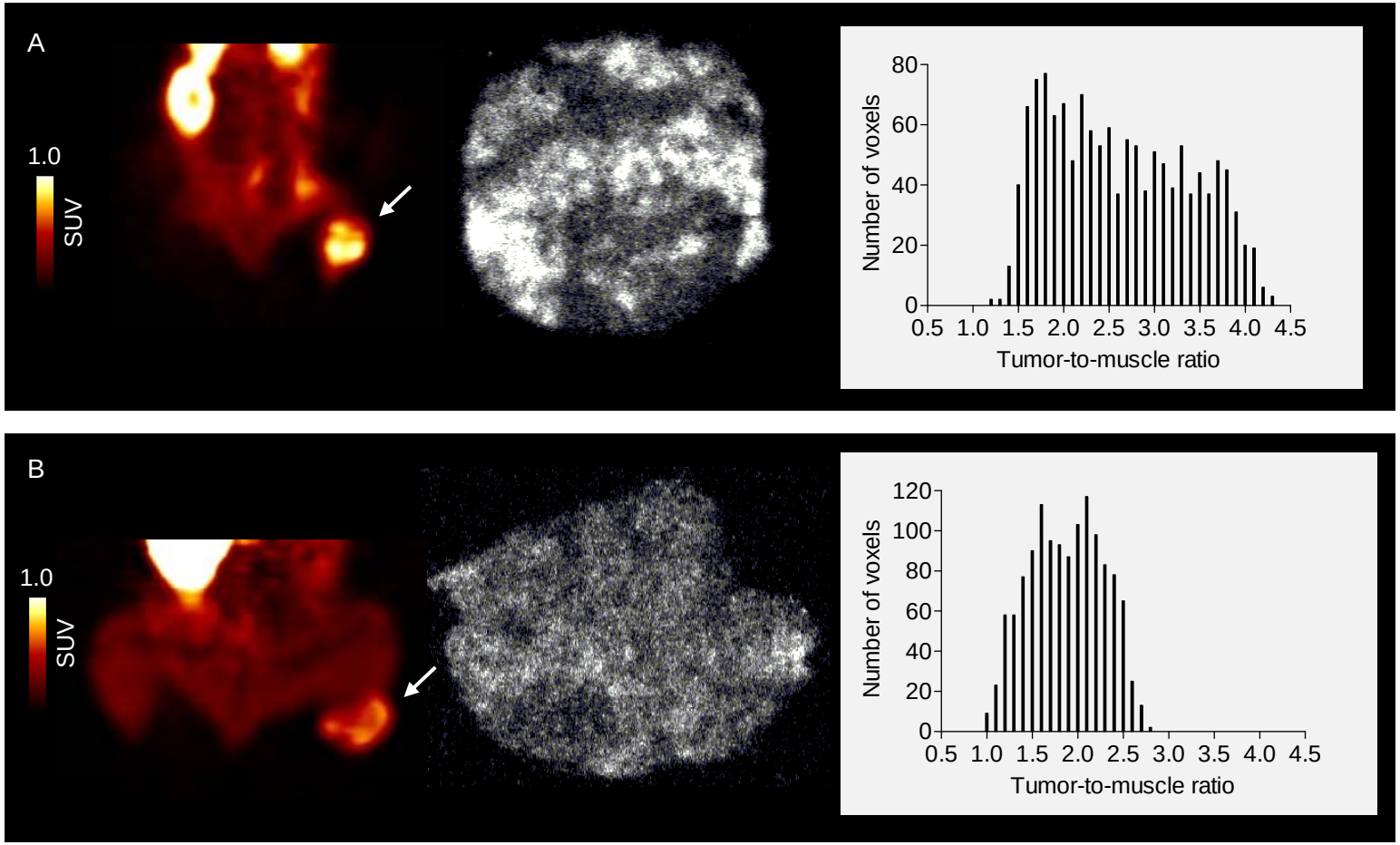
Comparison of tumor-to-muscle (T/M) ratios derived from PET images with those obtained from ex vivo gamma counting of tumor and muscle tissues after imaging for the 3 tumor types. Open circles: HCT116 tumors; filled circles: PC3; inverted triangle: H460. There was a significant positive correlation between the T/M ratios derived from microPET images and ex vivo gamma counting, validating the region-of-interest (ROI) analysis on PET images ($r = 0.78$; $P < 0.01$).

Supplemental Fig. 2



Scatterplots showing the inverse relationship between tumor binding of EF5 and the perfusion marker Hoechst 33342 in the 3 tumor lines studied. Data are for the tumor sections shown in composite fluorescence images in Figures 2-4 of the article.

Supplemental Fig. 3



Examples of ^{18}F-EF5 PET (left panels) and corresponding autoradiography images (middle panels) of H460 tumors from animals that received no additional EF5 (A) or 30 mg/kg EF5 (B). ^{18}F-EF5-alone animal showed higher and heterogeneous uptake of ^{18}F-EF5 in tumor (upper middle panel), and high T/M intensity ratios in voxelwise analysis of the PET data (upper right panel) compared with the coinjected animal (B).