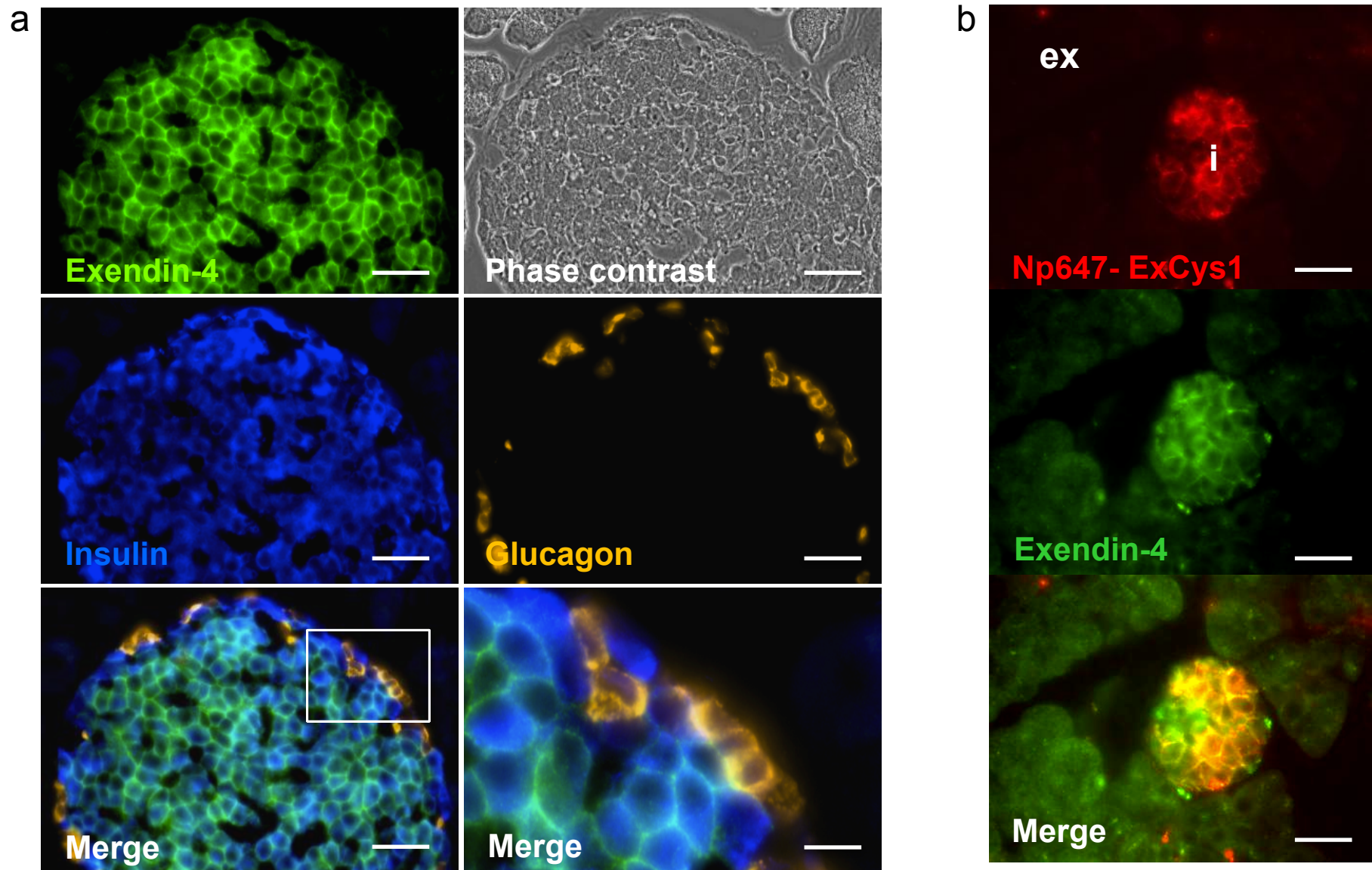




ESM Fig. 4. The Np647-ExCys1 probe colocalizes with exendin-4 *in vivo*. (a) One hour after the I.V. injection of 4 nmoles of exendin-4 peptide tagged with FITC on the K12 (Genicbio Limited, Shanghai, China), immunostaining shows that the fluoresceinated exendin-4 peptide distribution is limited to the insulin-containing beta cells, and excludes the glucagon-containing alpha cells. (b) After an i.v. injection of the Np647-ExCys1 probe, fluorescence microscopy reveals that the fluorochrome-tagged nanoparticles (upper panel) colocalizes with the attached exendin-4 peptide (as revealed by a antibody against exendin-4, middle and lower panel) on most islet cells (i). Bar, 30 μm in a, 50 μm in b, and 15 μm in the enlargement of the boxed area.