Supplemental Figure S1.

Image analysis of a 3D MR image of a mouse pancreas by volume rendering. *Panels A, B, C.* Orthogonal slice images through the visualized volume. Pixels are displayed in gray scale, white for high MR intensity, black for low MR intensity. Note the difference in MR intensities associated with the tube (higher intensity – red arrows) and the islets (medium intensity – green arrows). *Panel D.* A pseudo-color volume-rendered MR image showing a tube (red arrows) surrounded by islets (green arrows). *Panel E.* Opacity function (OPF) and color scale used to generate image (D). I_{Low}=1700 I_{High}= 65535, M_{axOp}=1. OPF function is super-imposed on the MR intensity histogram (shaded area). *Panels F, G, H.* Volume rendering of the same MR image with different OPF functions allow the selective visualization of pancreatic components. OPF and color scale used to generate the images are shown at the bottom of each panel. *F:* OPF function parameters (I_{Low}= 11200, I_{High}= 14700, M_{axOp}=1) show the tube alone; *G:* OPF function parameters (I_{Low}= 6000, I_{High}= 9700, M_{axOp}=0.5) show only the islets and the outer layer (low MR intensity) of the tube; *H:* OPF function parameters (I_{Low}= 6000, I_{High}= 14700, M_{axOp}=1) show both islets and the tube.