Supplementary Information

Figure S1. Ecd expression in pancreatic cancer cell lines

(A) Western Blot analysis shows the levels of Ecd protein expression in different PC cell lines – well to moderately differentiated (SUIT2, HUPT3, FG, Capan1, HPAC, CD18 /HPAF, and T3M4) and poorly differentiated (HCG25, MiaPaCa) PC cells. All the cell lines showed moderate to high level of Ecd protein expression but there was no correlation with the differentiation status. (B) Quantitative Real-time PCR analysis of Ecd mRNA expression in different PC cell lines compared to HPDE cells (normal immortalized human pancreatic ductal epithelial cells).

Figure S2. Variation in GLUT4 expression in Scrambled vs. Ecd KD pancreatic cancer cells. (A) Reduction in GLUT4 protein and mRNA level on Ecd depletion. Western Blot analysis (top) and quantitative real time PCR analysis (bottom) of Ecd KD MiaPaCa and Capan1 PC cells show decreased GLUT4 expression compared to vector control cells. (B) Distribution of GLUT4 in membrane fraction of Ecd KD vs scrambled cells. Cytoplasmic and membrane fractionation of Ecd KD and scrambled PC cells was performed by ultracentrifugation. Membrane fraction of Ecd in scrambled cells shows higher GLUT4 level than that of the KD cells. PGK and HER2 are used as markers of the cytoplasmic and membrane fraction of the cells.

Figure S3. In vivo glucose uptake in orthotopic tumors of Capan1 Scr and Capan1 Ecd KD cell injected mice. Representative images showing in vivo uptake of IR800-dye labeled 2DG into orthotopic tumors of athymic mice developed after injection with Capan1 Scr (top) and Ecd KD cells (bottom), as visualized through the Pearl Imager. The images reflect that Ecd depletion of PC cells leads to decrease in glucose uptake under in vivo conditions.