SUPPLEMENTARY FIGURE LEGENDS

Supplementary Fig. 1: GLP-1 cells are induced with the Notch inhibitor. (A) Total protein level (left), PC1/3 and CGA (right) proteins were quantified by Simple Western assay (Protein Simple). Reconstructed images are shown for the Notch inhibitor (DAPT) treatment kinetics for 1 patient (ObPreD). Molecular weight markers in kDa. **(B)** Results are normalized to respective total protein levels, and expressed as ratio values normalized to the control (untreated for 96h) (mean +/- SEM). Ob (n=1, blue circle), ObPreD (n=2, orange circle) and ObD (n=1, green circle) individuals. **(C)** Gene expression was determined by RT-qPCR for proglucagon gene (*GCG*), chromogranin A gene (*CHGA*) and prohormone convertase 1/3 gene (*PCSK1*). The *RPLP0* gene was used for normalization. Relative quantification was determined using the $2^{-\Delta\Delta Ct}$ method. Results are expressed as mean +/- SEM. Gene expression of these markers is increased during the kinetics following DAPT treatment. Ob (n=1, blue circle), ObD (n=1, green circle) individuals. *$p < 0.05$, **$p < 0.01$

Supplementary Fig. 2: Cytotoxicity assay during GLP-1 active secretion experiments. Cytotoxicity assessed by Lactate Dehydrogenase assay (Sigma) release in the medium of HJEs treated with low (5mM) or high (50mM) glucose and +/- 10µM Forskolin / 10µM IBMX (F/I). Cytotoxicity is expressed as the percentage relative to that obtained in HJEs treated with 0.04% Triton X-100 (mean +/- SEM). Neither basal nor high glucose concentrations, with or without the F/I mix, increased cell death as assessed by LDH activity. Ob (n=4, blue circle), ObPreD (n=6, orange circle) and ObD (n=4, green circle) individuals.