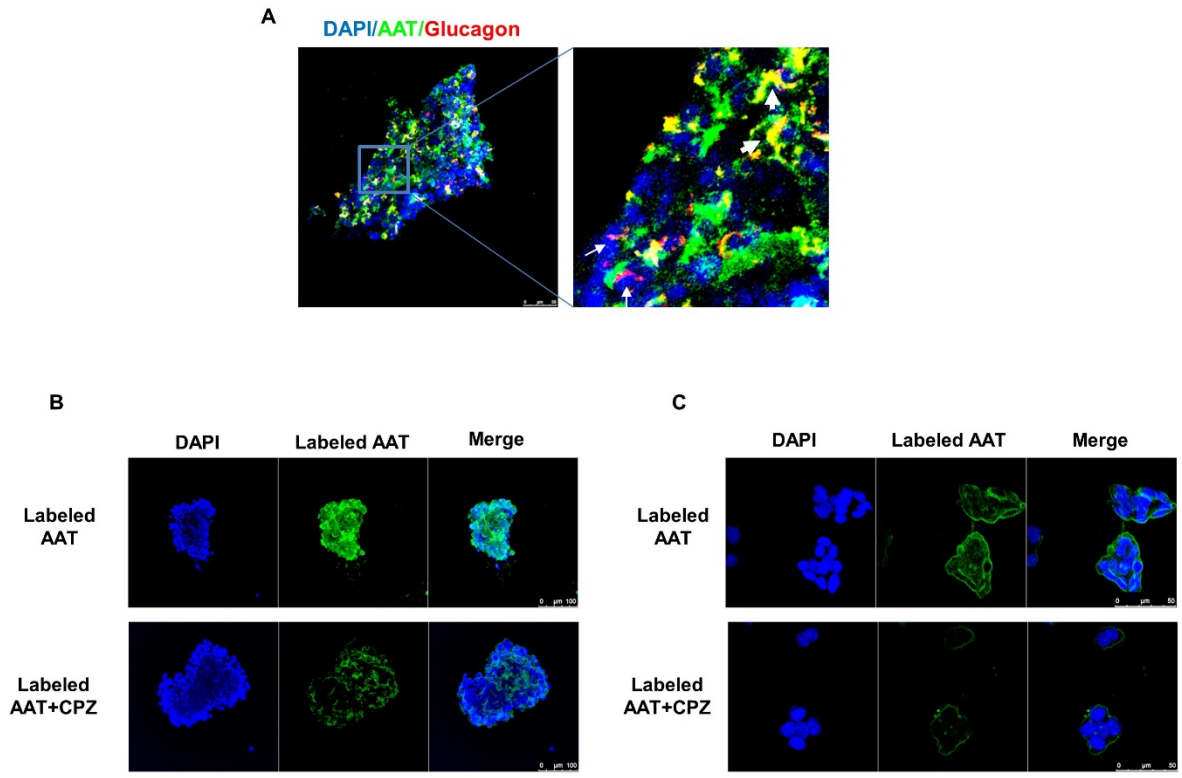
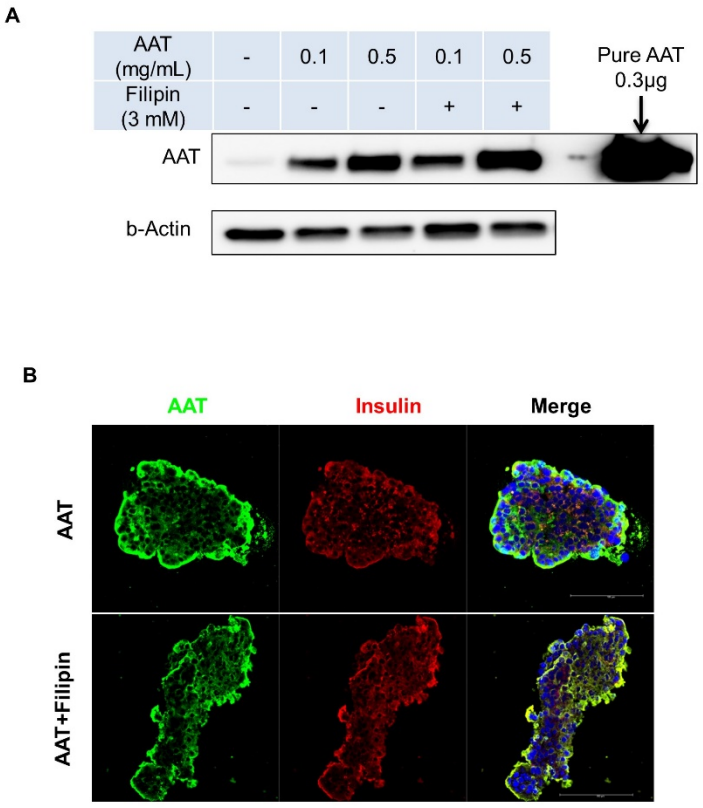
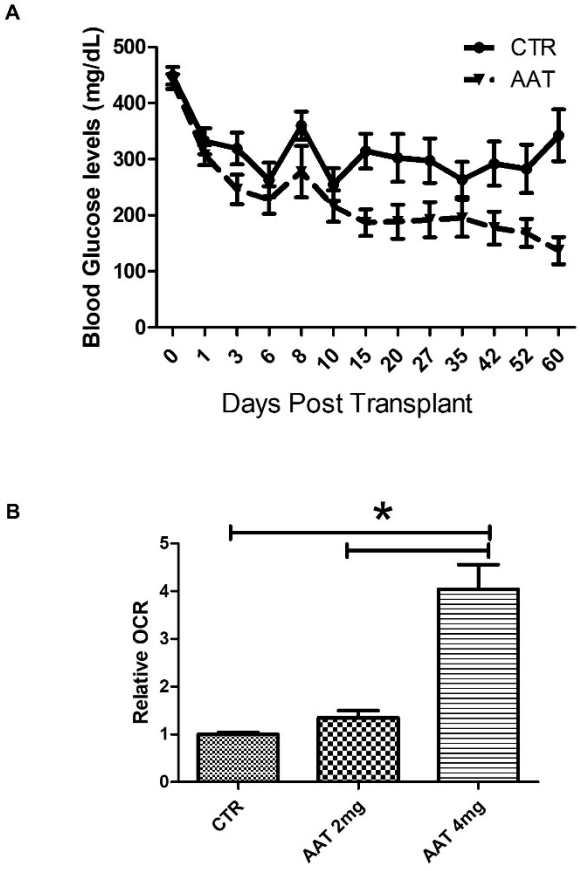
Clathrin-mediated Endocytosis of Alpha-1 Antitrypsin is Essential for its Protective Function in Islet Cell Survival (Supplemental data)



Supplemental Data, Figure 1. (A) Representative fluorescent micrographs show human islets stained for AAT (green), glucagon (red) and nuclei (blue). Arrow heads indicate α cells with the presence and absence of AAT. (B) Representative micrographs of mouse islets treated with labeled AAT (green) in the absence (top panel) or presence of CPZ (bottom panel). Nuclei were stained with DAPI. (C) Representative micrographs of βTC3 cells treated with labeled AAT (green) in the absence (top panel) or presence of CPZ (bottom panel). Nuclei were stained with DAPI.



Supplemental Data, Figure 2. (A) Immunoblots show the pretreatment with filipin did not influence AAT internalization by human islet cells. (B) Representative fluorescent micrographs show human islets stained for AAT (green), glucagon (red) and nuclei (blue). Scale bar=100 µm.



Supplemental Data, Figure 3. (A) Glucose levels from days 0–60 PT. CTR consists of animals that received islets from saline-treated donors (n=13). AAT consists of animals that received islets from AAT-treated donors (n=15). (B) OCR of islets isolated from Swiss mice. Donors treated with saline (CTR), donors treated with 80 mg/kg AAT and donors treated with 160 mg/kg AAT.

Supplemental Data, Table 1. OCR/DNA levels of human islets after each treatment.

Treatment	OCR/DNA (nmol/min.mg DNA ± SD
Ctrl	124.2 ± 6.4
Cytokine	84.5 ± 3.0
AAT	145.6 ± 19.6
CPZ	113.9 ± 4.7
AAT+ Cytokine	113.7 ± 6.1
AAT+Cytokine+CPZ	92.9 ± 1.6