Spautin-1 Ameliorates Acute Pancreatitis via Inhibiting Impaired Autophagy and Alleviating Calcium Overload

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**Supplementary Figure S1.** Cerulein or L-arginine induces impaired autophagy related to trypsinogen activation in pancreatic acinar cell. (A, B) AR42J were treated with the indicated concentration of cerulein (A) or L-arginine (B) for 24 h and then lysates were analyzed by Western blotting with anti-LC3, anti-p62, antibecn1, antitubulin and antiubiquitin antibodies. The relative levels of LC3II, p62 and becn1 expression were are quantified using Image J and exhibited as line graphs from two independent sets of experiments. (C, D) AR42J were treated with the indicated concentration of cerulein (C) or L-arginine (D) for 24 h. Lysates from AR42J cells under indicated treatment were subjected to trypsin activity assay. Error bars represent SD. Student t test was used for statistical analysis.
Supplementary Figure S2. Spautin-1 decreases the level of serum amylase induced by cerulein or L-arginine in mice. (A, B) Four mice in each group. Mice received four injections of cerulein (A) or three injections of L-arginine (B) or saline at one hour intervals. Spautin-1 was injected 30 min before the first cerulein or L-arginine injection. Mice were sacrificed three, six and nine hours after the last injection. Serum level amylase were measured. Error bars represent SD. One factor analysis of variance was used for statistical analysis. P1: saline versus cerulein, P2: cerulein versus cerulein + spautin-1 (A). P1: saline versus L-arginine, P2: L-arginine versus L-arginine + spautin-1 (B).

Supplementary Figure S3. Spautin-1 blocks cytosolic calcium sensitive phosphorylation of CAMKII induced by cerulein or L-arginine in vitro. (A, B) Lysates from AR42J cells under cerulein (A) or L-arginine (B) treatment with indicated concentration were analyzed by Western blotting with anti-CaMKII, anti-phos-CaMKII and anti-tubulin antibodies.