#### **Supplemental Information**

### **Efficacy and Safety of Pancreas-Targeted**

#### **Hydrodynamic Gene Delivery in Rats**

Kohei Ogawa, Kenya Kamimura, Yuji Kobayashi, Hiroyuki Abe, Takeshi Yokoo, Norihiro Sakai, Takuro Nagoya, Akira Sakamaki, Satoshi Abe, Kazunao Hayashi, Satoshi Ikarashi, Junji Kohisa, Masanori Tsuchida, Yutaka Aoyagi, Guisheng Zhang, Dexi Liu, and Shuji Terai

Supplementary Figure S1. Effect of pancreas-targeted HGD on the small intestine.

Immunohistochemical staining with an antiluciferase antibody was performed on tissue

of small intestine collected 4 h after systemic HGD (a, b) or pancreas-targeted HGD (c,

d). The scale bar represents 100 µm. Black arrowhead indicates the positively stained

cells.

Supplementary Figure S2. Impact of DNA on serum concentrations of amylase.

The serum biochemical analysis was performed with sera collected 4 h after the

pancreas-targeted HGD of 2% BW saline with or without plasmid DNA. The

concentrations of serum amylase represent mean ± SD (n = 5). N.S., no statistical

significance by t-test.

**Materials and Methods for Supplementary Data** 

Tissue samples for immunohistochemical staining were collected from the small

intestine 4 h after the HGD of pCMV-Luc plasmid, fixed in 10% formalin upon tissue

collection and embedded in paraffin. A standard immunohistochemistry was performed

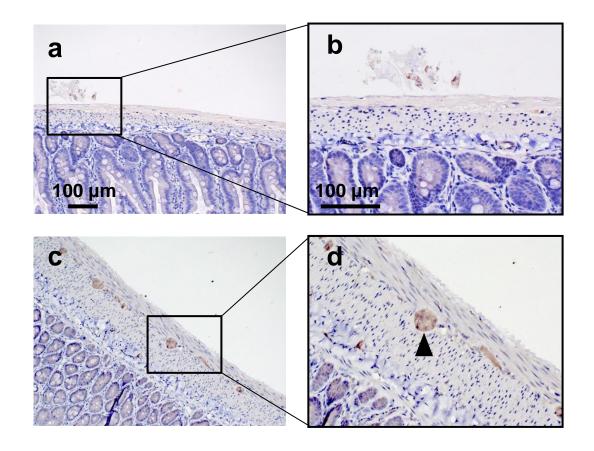
using goat anti-Luciferase polyclonal antibody (G7451, 1:100 dilution; Promega Inc.,

Madison, WI, USA), Vecstain Elite ABC Goat IgG kit (PK-6105; Vector Laboratories

1

Inc., Burlingame, CA, USA), and DAB chromogen tablet (Muto Pure Chemicals Co. Ltd, Bunkyo-ku, Tokyo, Japan). Blood samples were collected from each rat 4 h from tail vein or IVC. The serum biochemical analysis was performed by BML Inc. (Shibuya-ku, Tokyo, Japan).

# Supplementary Figure 1



## **Supplementary** Figure 2

