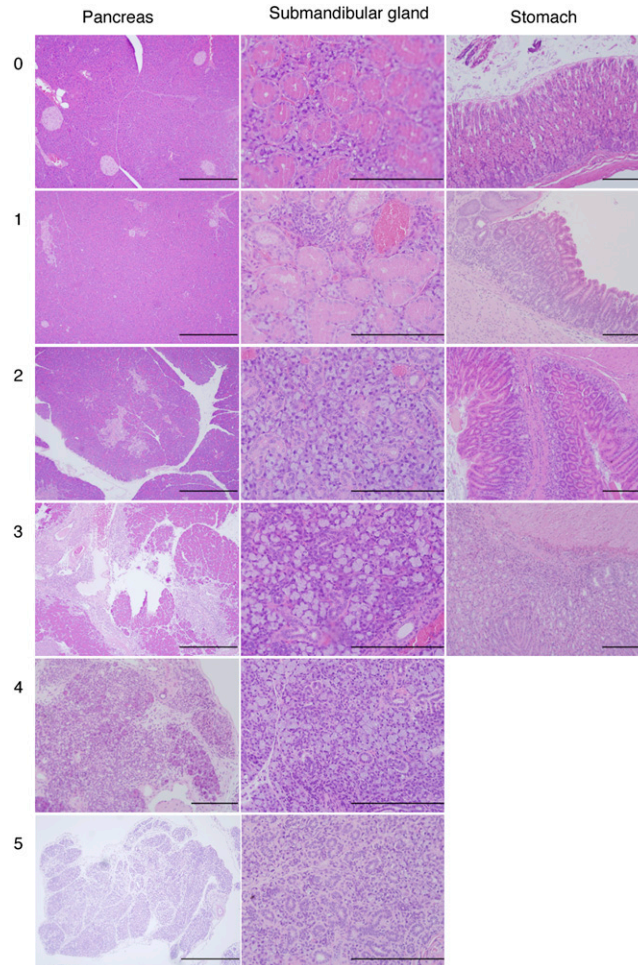
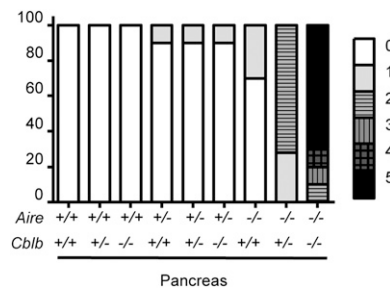


# Supporting Information

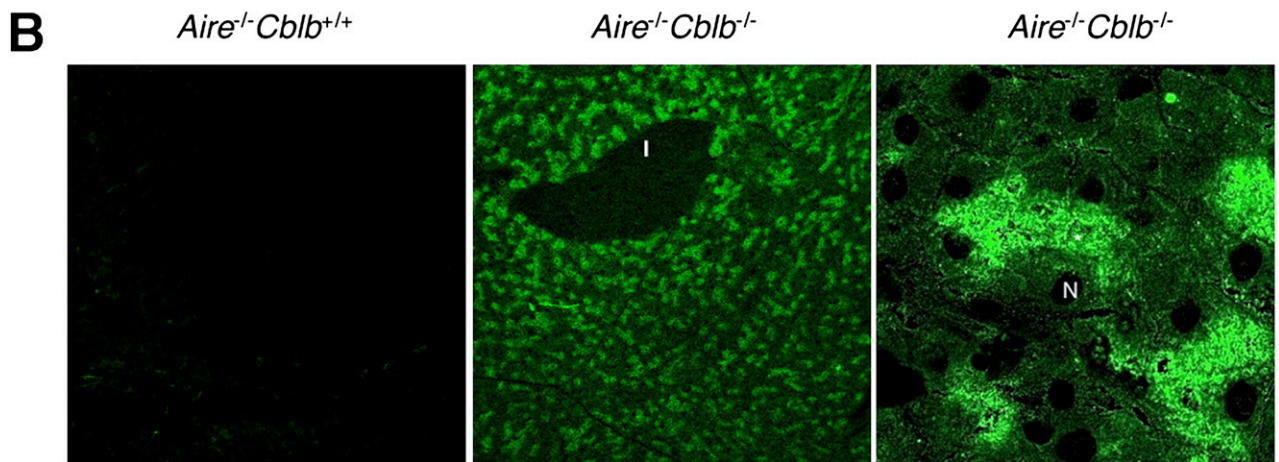
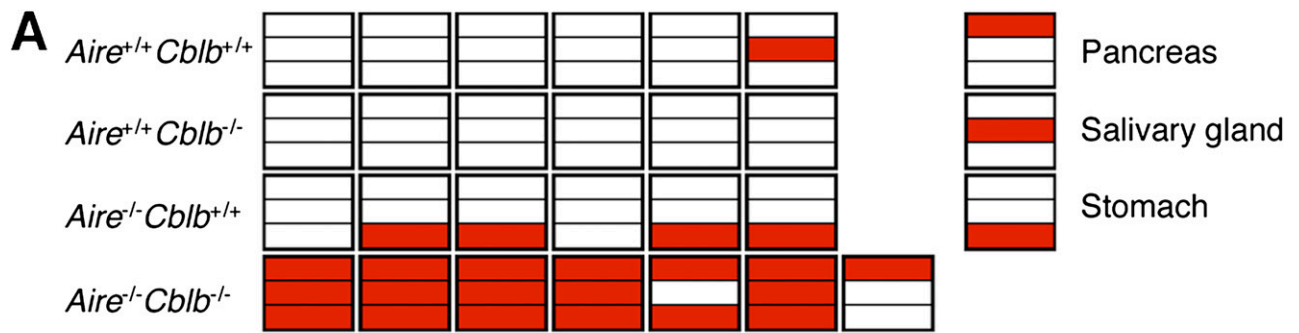
Teh et al. 10.1073/pnas.1009209107



**Fig. S1.** Scoring system for histopathology. Pancreas: (0) No pancreatitis detected; (1) Perivascular/periductal lymphocyte infiltration; (2) Small patches of lymphocyte infiltration in the exocrine tissue; (3) Extensive infiltration in the exocrine pancreatic tissue and destruction of <50% of the exocrine acinar tissue; (4) Extensive infiltration in the exocrine pancreatic tissue and destruction of 50–90% of the exocrine acinar tissue; (5) Extensive infiltration in the exocrine pancreatic tissue and complete absence of exocrine acinar tissue. Original magnification:  $\times 100$ . (Scale bars: 500  $\mu\text{m}$ .) Submandibular salivary gland: (0) No sialoadenitis detected; (1) Multiple small patches of perivascular/periductal lymphocyte infiltration; (2) Small patches of lymphocyte infiltration in the supporting tissue, almost complete absence of serous acini, and no destruction of mucous acini; (3) Diffuse lymphocytic infiltration, complete absence of serous acini, and destruction of less than 50% of the mucous acinar tissue; (4) Diffuse lymphocytic infiltration, complete absence of serous acini and destruction of 50–90% of the mucous acinar tissue; (5) Diffuse lymphocytic infiltration, complete absence of serous acini, and >90% absence of mucous acinar tissue. Original magnification: 400 $\times$ . (Scale bars: 200  $\mu\text{m}$ .) Stomach: Varying lymphocytic infiltration in the stomach. Original magnification: 200 $\times$ . (Scale bars: 200  $\mu\text{m}$ .)



**Fig. S2.** Pancreatitis scores of 3- to 20-wk-old mice of the indicated genotypes ( $n \geq 7$  for each group).



**Fig. S3.** Detection of autoantibodies in the pancreas, salivary gland, and stomach of *Aire*<sup>-/-</sup> *Cblb*<sup>-/-</sup> mice. (A) Results of immunofluorescent testing of sera from individual *Aire*<sup>+/+</sup> *Cblb*<sup>+/+</sup>, *Aire*<sup>+/+</sup> *Cblb*<sup>-/-</sup>, *Aire*<sup>-/-</sup> *Cblb*<sup>+/+</sup>, and *Aire*<sup>-/-</sup> *Cblb*<sup>-/-</sup> 3- to 8-wk-old mice, tested against frozen sections of *Rag1*<sup>-/-</sup> pancreas, submandibular salivary gland, and stomach. Each box represents a single mouse and filled sections denote positive immunofluorescence. *Aire*<sup>-/-</sup> *Cblb*<sup>-/-</sup> sera yielded diffuse cytoplasmic staining of most cells in salivary gland. In the stomach, *Aire*<sup>-/-</sup> *Cblb*<sup>-/-</sup> sera selectively stained crypt epithelium in a pattern comparable to *Aire*<sup>-/-</sup> *Cblb*<sup>+/+</sup> sera and to that published for sera from *Aire*<sup>-/-</sup> NOD mice (1). (B) Representative immunofluorescent staining of frozen sections of pancreas from *Rag1*<sup>-/-</sup> mice by anti-IgG in serum from *Aire*<sup>-/-</sup> *Cblb*<sup>-/-</sup> mice and from an *Aire*<sup>-/-</sup> *Cblb*<sup>+/+</sup> mouse. Islet of Langerhans is marked by "I". High power view shows granular pattern of staining most intensely in the apical cytoplasm of exocrine acinar cells, marked by "\*\*". Nuclei are marked by "N". Original magnification: 200× (Left and Center), 600× (Right).

1. Jiang W, Anderson MS, Bronson R, Mathis D, Benoist C (2005) Modifier loci condition autoimmunity provoked by Aire deficiency. *J Exp Med* 202:805-815.