SUPPLEMENTARY INFORMATION

Synaptotagmin 2 Couples Mucin Granule Exocytosis to Ca^{++} Signaling from Endoplasmic Reticulum

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Supplementary Figures

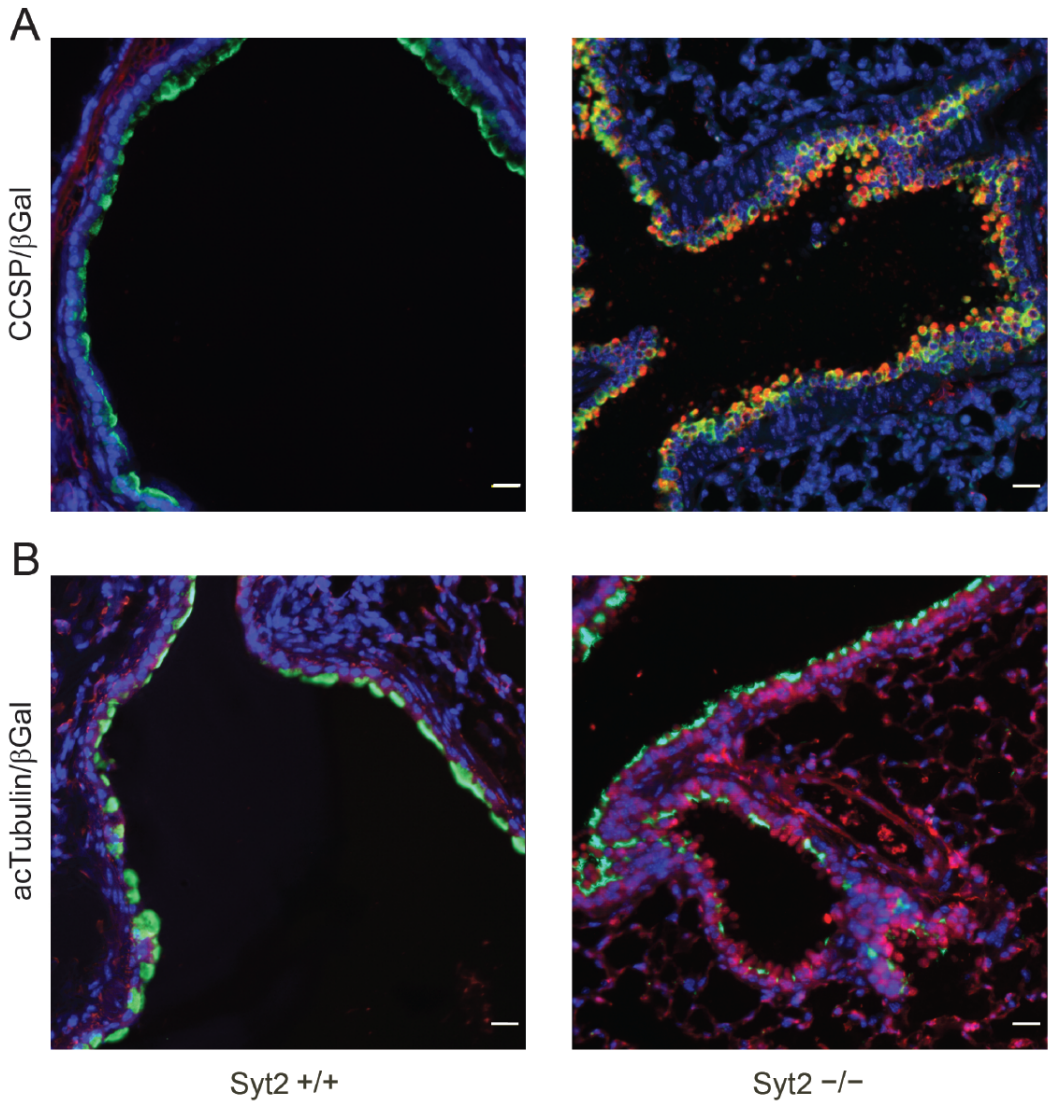

Figure S1. Syt2 is expressed in airway secretory (Clara) cells. *A,* Sections of bronchial airways of WT (left) and null (right) neonatal mice were labeled with antibodies against β-galactosidase (red) and CCSP (green), and nuclei were labeled with DAPI (blue). Control WT mice show no red labeling, whereas null mice show both red and green labeling of Clara cells alternating with ciliated cells that are not labeled with either antibody. Scale bars = 20 μm. *B,* Sections of bronchial airways of WT (left) and null (right) neonatal mice were labeled with antibodies against β-galactosidase (red) and acetylated tubulin (green), and nuclei were labeled with DAPI (blue). Control WT mice show no red labeling, whereas null mice show red labeling of Clara cells that can often be identified by their domed protrusion into the airway lumen, and green labeling of ciliated cells that are not labeled with β-galactosidase antibodies. Scale bars = 20 μm.

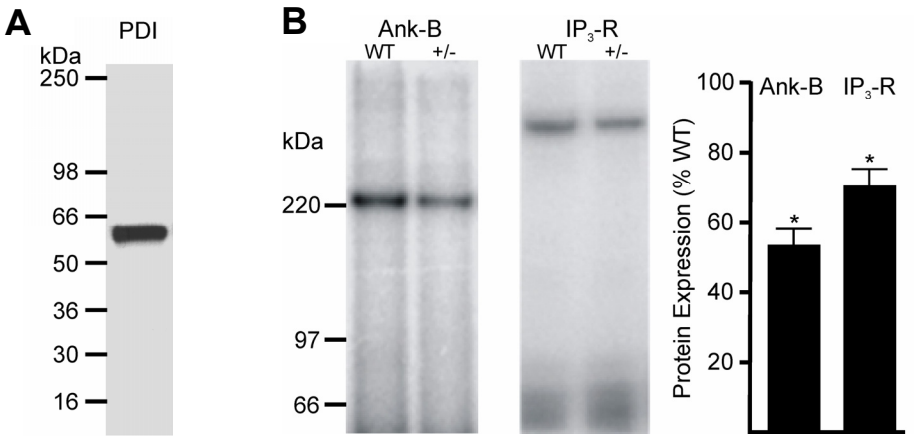

Figure S2. PDI and pan-IP_3R antibodies are highly specific in lung tissue. *A*, To confirm the specificity of PDI antibodies, an immunoblot of a human airway cell line (16HBE14o) lysate showed a single band at 61 kDa. *B*, We tested the specificity of pan-IP_3-R antibodies in mouse lungs by taking advantage of the known dependency of IP_3-R expression on ankyrin-B (Ank-B) expression. Immunoblots showed similar reductions in Ank-B protein (left) and IP_3-R (center) in Ank-B +/- mice compared to WT mice. Densitometric analysis of several such blots is illustrated (right).