

Description of Additional Supplementary Files

Supplementary Data 1. Raw Proteomic Data of small intestinal peptides. Distal small intestine from *Tvp23b*^{+/+} and *Tvp23b*^{-/-} mice were lysed and analyzed by LC MS/MS.

Supplementary Data 2: Raw O-glycosylation data. Colon epithelial cells were isolated from *Tvp23b*^{+/+} and *Tvp23b*^{-/-} mice were analyzed for O-glycosylation by mass spectroscopy.

Supplementary Data 3: Raw Golgi Proteomics data. Golgi from colonic epithelial cells were purified from *Tvp23b*^{+/+}, *Tvp23b*^{-/-}, *Yipf6*^{+/y} and *Yipf6*^{klz/y} mice and analyzed by mass spectroscopy.

Supplementary Data 4. Table of Key resources.