## Supplemental Data



Figure S1

M2R-immunoreactivity in M2R<sup>-/-</sup> animals. Triple-labeling immunohistochemistry shows that M2R-immunoreactivity was absent from the smooth muscle cells (labeled with  $\alpha$ -smooth muscle cell actin, B) of the m. trachealis (m) but labeling was still present in pericyte-like cells surrounding CD31-immunoreactive endothelial cells (C) in the lamina propria (arrows). (D) Merge of A-C. Bar = 50  $\mu$ m.

## Figure S2



Rüdeberg-stained semi-thin sections of the tracheae of M1R<sup>-/-</sup>, M2R<sup>-/-</sup>, and M3R<sup>-/-</sup> and their corresponding WT mice in regions overlying cartilage, muscle and ligament, respectively. Bar =  $20 \mu m$ .

## Figure S3



Immunoreactivity for villin (A-D) and PGP 9.5 (E-H) in the tracheal epithelium of M1R<sup>-/-</sup>, M2R<sup>-/-</sup>, and M3R<sup>-/-</sup> mice and their WT controls. Bar = 10  $\mu$ m