





**Supplement Figure 1.** FRET-CLSM-analysis, detection of association between M2R/Cav-3 and Cav-1/Cav-3 in heart atrium. \*\*\*  $p \leq 0.001$ , \*\*  $p \leq 0.01$ , n=number of ROI/animals. Boxplots: percentiles 0, 25, median, 75, 100; extreme values (o).

**Supplement Figure 2.** Videomorphometric recordings of bronchoconstrictor responses. Data are presented as changes in the luminal area of peripheral airways before and after vehicle treatment. Vehicle treatment had no impact on bronchoreactivity, neither in M3R<sup>-/-</sup> (muscarine  $p=0.208$ ; KCl  $p=0.263$ ; 5-HT  $p=0.327$ ; A), in M3R<sup>+/+</sup> (muscarine  $p=0.612$ ; KCl  $p=0.237$ ; 5-HT  $p=0.237$ ; B), in M2R<sup>-/-</sup> (muscarine  $p=0.075$ ; KCl  $p=0.463$ ; 5-HT  $p=0.345$ ; C) nor in M2R<sup>+/+</sup> mice (muscarine  $p=0.110$ ; KCl  $p=0.013$ ; 5-HT  $p=0.534$ ; D), except a minimal increased response to KCl in M2R<sup>+/+</sup> mice after vehicle treatment. Data are presented as mean  $\pm$  SE; n=number of bronchi/animals; \*  $p \leq 0.05$ ; n.s.=not significant.