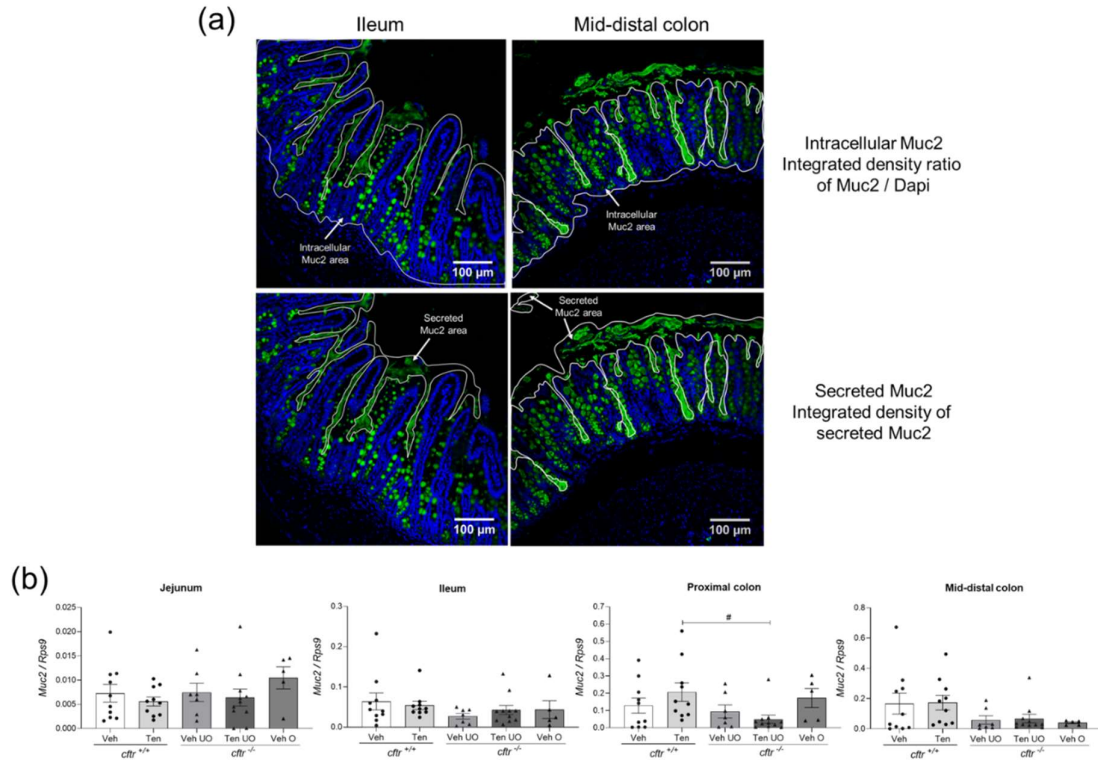


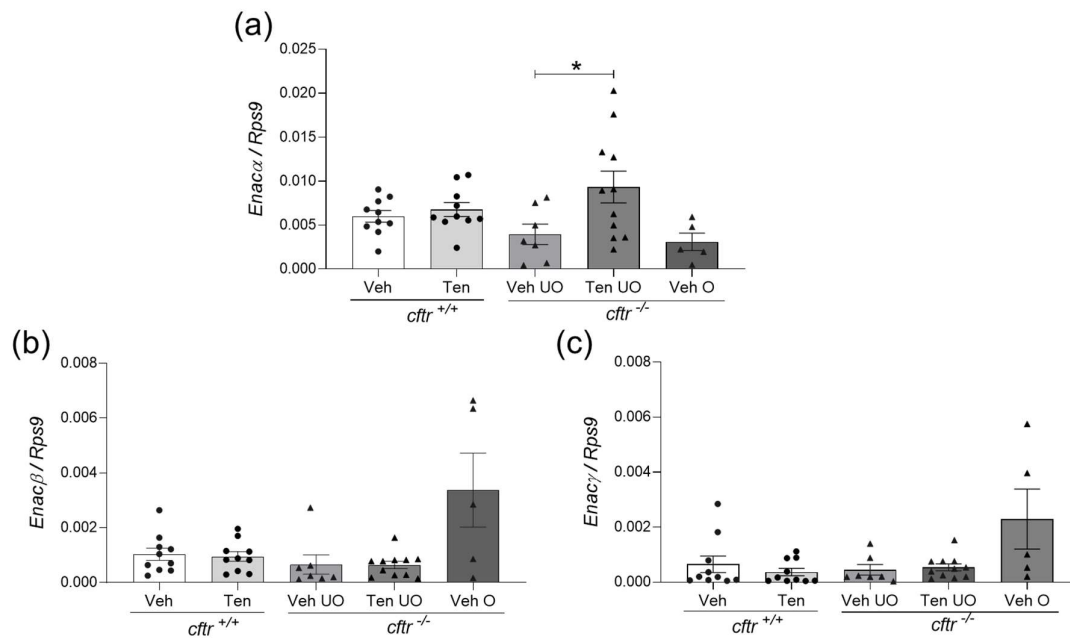
## Supplementary Materials

**Table S1. List of Primers.**

| Gene                           | Forward                       | Reverse               |
|--------------------------------|-------------------------------|-----------------------|
| <i>Rps9</i>                    | AAGCACATCGACTTCTCCC           | ACAATCCTCCAGTTCAGCC   |
| <i>Ly6g</i>                    | GAGAGGAAGTTTTATCTGTGCAGC<br>C | TCAGGTGGGACCCCAATACA  |
| <i>Muc1</i>                    | GCAGTCCTCAGTGGCACCTC          | CACCGTGGGCTACTGGAGAG  |
| <i>Muc2</i>                    | CCTGAAGACTGTCGTGCTGT          | GGGTAGGGTCACCTCCATCT  |
| <i>Mcp1</i>                    | CTGCTGTTACAGTTGCCG            | GCACAGACCTCTCTCTTGAGC |
| Gene                           | Company / Catalog number      |                       |
| <i>Tnfa</i>                    | Quantitect # QT00104006       |                       |
| <i>Il1<math>\beta</math></i>   | Quantitect # QT01048355       |                       |
| <i>Enaca</i>                   | Quantitect # QT00198289       |                       |
| <i>Enac<math>\beta</math></i>  | Quantitect # QT00104335       |                       |
| <i>Enac<math>\gamma</math></i> | Quantitect # QT00126168       |                       |



**Figure S1.** (a) Example of how the intra- and luminal mucus compartments were delineated and subsequently assessed. Both the intracellular, as well as the luminal secreted Muc2 associated immunofluorescent intensity<sup>1</sup> was measured and related to the Dapi associated immunofluorescence. (b) *Muc2* mRNA expression. Each dot/ triangle represents one mouse. Veh – vehicle, Ten – tenapanor, UO – unobstructed, O – obstructed. Data is represented as mean  $\pm$  SEM.



**Figure S2.** mRNA expression of (a) *Enacα*, (b) *Enacβ*, and (c) *Enacγ* in the mid-distal colon. Each dot / triangle represents one mouse. Veh – vehicle, Ten – tenapanor, UO – unobstructed, O – obstructed. Data is represented as mean ± SEM.

## Reference

1. Honda, S.; Loher, P.; Morichika, K.; Shigematsu, M.; Kawamura, T.; Kirino, Y., et al. Increasing cell density globally enhances the biogenesis of Piwi-interacting RNAs in *Bombyx mori* germ cells. *Scientific Reports* **2017**, *7*, 4110.