

1 **Supplementary information**

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3 **The ventral peptidergic system of the adult ascidian *Ciona robusta* (*Ciona intestinalis* Type**
4 **A) insights from a transgenic animal models**

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9 **Supplementary Figure Legends**

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11 **Figure S1.** Distribution of PC2 promoter-driven Kaede-positive cells in another PC2 transgenic line,
12 Tg[MiCiPC2K]3. **(A)** Kaede-positive cells distributed along the anterior pharyngeal blood sinus
13 (arrowheads). The Kaede-positive cells are also shown in the endostyle (arrows). **(B)** Kaede-positive
14 cells in the endostyle. **(C)** Representative Kaede-positive cells in the papilla of the pharynx
15 (arrowheads). A representative cluster of the Kaede-positive cells is indicated by an arrow. **(D)**
16 Kaede-positive cells in the esophagus. **(E)** Kaede-positive cells in the stomach. **(F)** Kaede-positive
17 cells in the intestine. **(G)** Overview of the heart in a composite image. **(H)** Overview of the heart in a
18 dark field image. Kaede signals in both ends of the heart and raphe are shown in green. **(I)**
19 Kaede-positive nerve plexus at the end of the heart. ABS, anterior pharyngeal blood sinus; AH,
20 anterior hood, CF, ciliated funnel; En, endostyle; NC, neural complex.

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22 **Figure S2.** Overview of the alimentary canal of *Ciona*, Tg[MiCiPC2K]2 line. **(A)** Bright-field image
23 of the alimentary canal. The stomach and intestine were cut and opened to show the inner walls. **(B)**
24 Dark-field image of the alimentary canal. Kaede-positive cells are shown as green dots. Gn, gonad;
25 Int, intestine, St, stomach.

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27 **Figure S3.** Blood sinus connecting the stomach and ovary. Bright-field image of the stomach, ovary,
28 and intestine. The stomach and ovary are connected via a blood sinus (arrowheads). St, stomach; Ov,
29 ovary; Int, intestine.

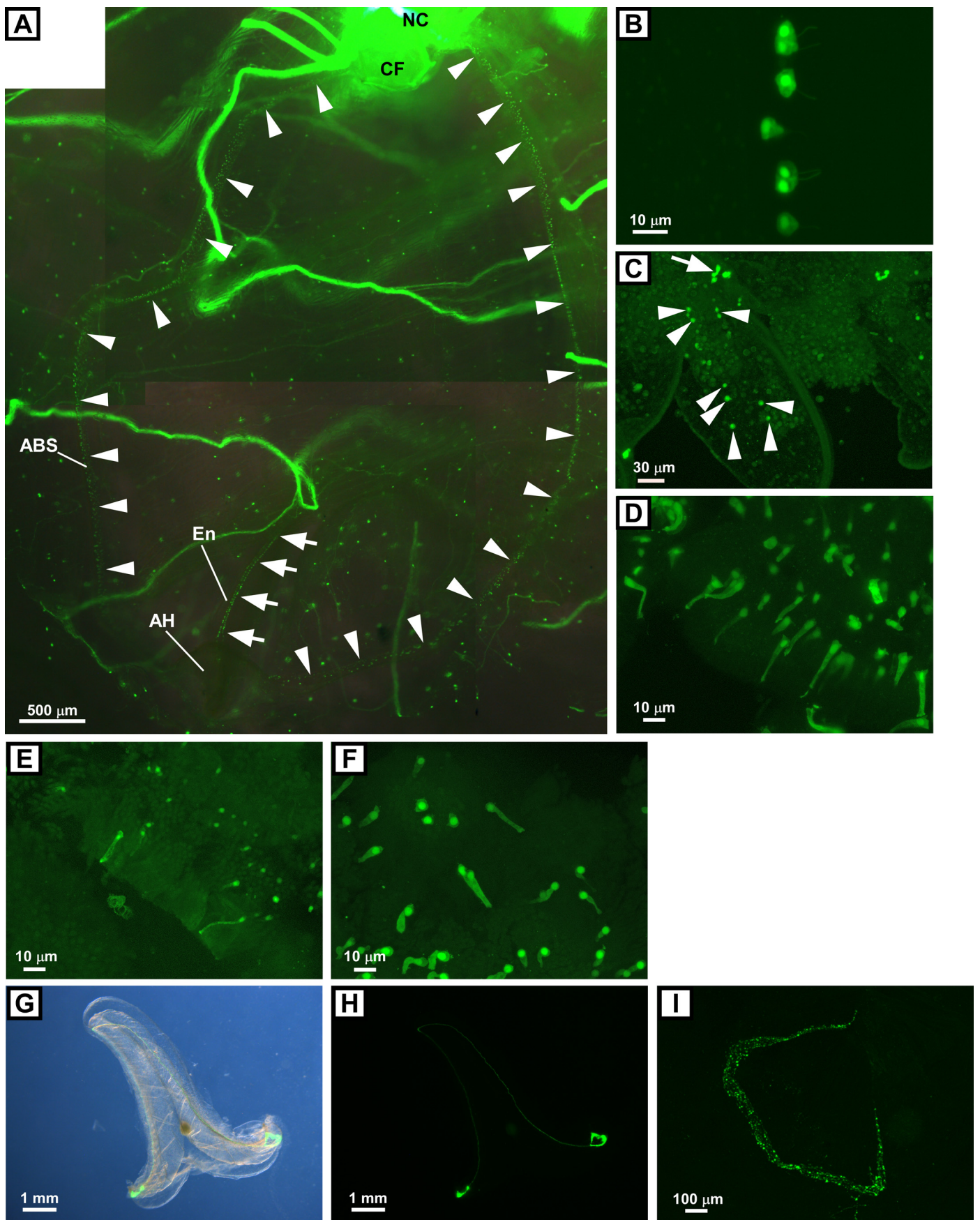


Fig. S1

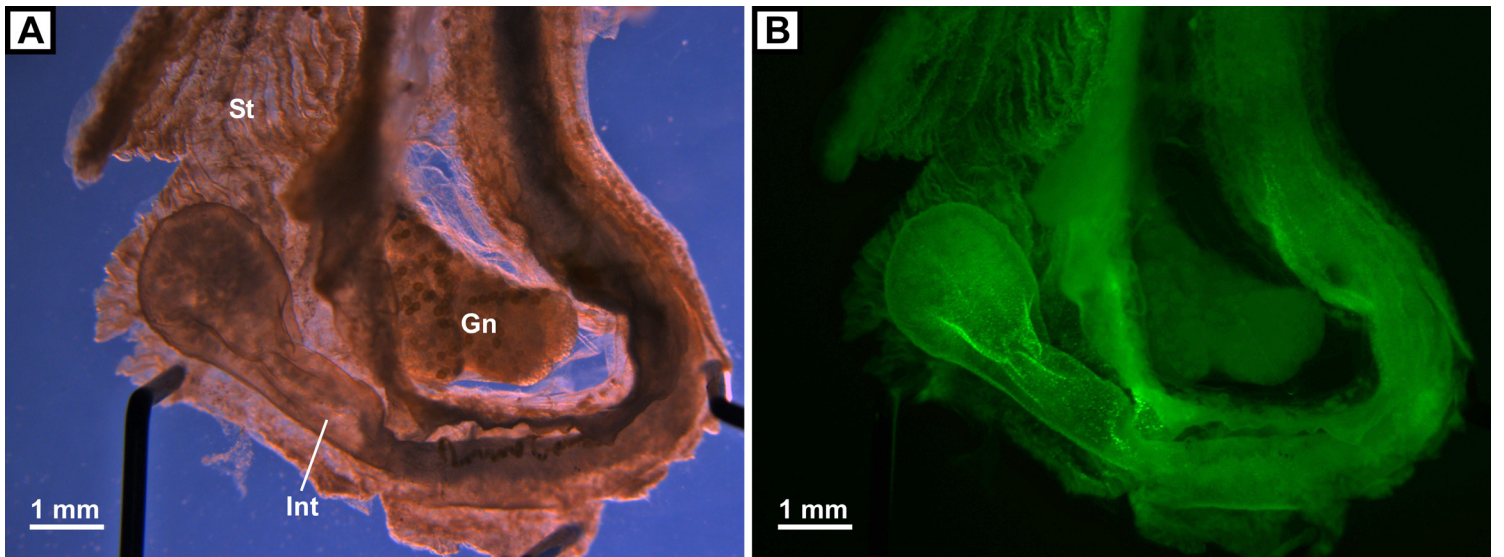


Fig. S2

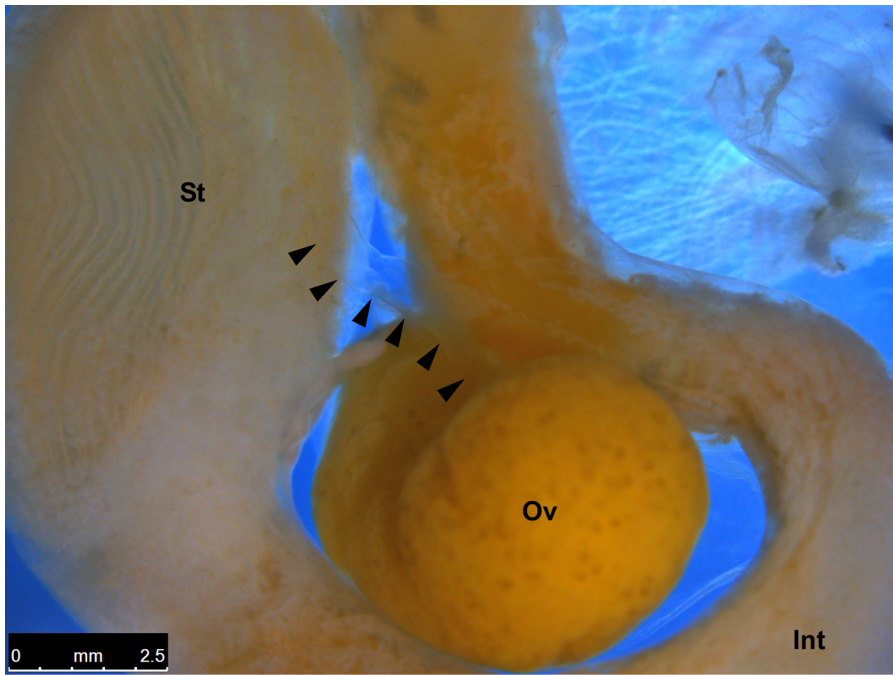


Fig. S3