



**Figure S2. TTX regulates voltage-gated Na<sup>+</sup> channel of *L. stagnalis* RPeD1 neuron in a dose-dependent manner.** (A) Representative Na<sup>+</sup> currents activated from a voltage step from a holding voltage of -50 mV to +10 mV in the absence or presence of various TTX concentrations. Note a residual current that was not blocked by 300  $\mu$ M of TTX; it is considered TTX-insensitive component. (B) Dose-response curve of the TTX sensitive voltage-gated Na<sup>+</sup> current. Data are presented as mean  $\pm$  s.e.m. (n = 3) and the curve was fit with Hill equation. Half-maximal inhibitory concentration (IC<sub>50</sub>) is 23.7  $\mu$ M.