

Fig. S1. Chemosensitivity is preserved in the semi-intact preparation. A) Representative traces showing increased burst frequency after 10 minutes of hypercapnia (aCSF CO₂ raised from 1.5% to 5%). B) All 3 preparations tested increased burst frequency in hypercapnia (average increase of 96%), which could be observed simultaneously in the cell respiratory synaptic input and in the population burst.

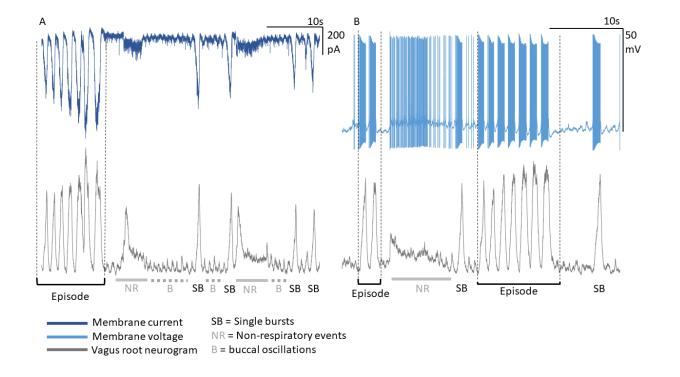


Fig. S2. The semi-intact preparation presents single and episodic bursts. Single bursts, doublets, episodic events, buccal oscillations, and non-respiratory events can be observed in the semi-intact preparation. Bursts occur concurrently with the respiratory-related synaptic current (A) and the motoneuron firing (B). The representative trace was recorded in control conditions (aCSF gassed with 1.5% CO₂ and 98.5% O₂).