Supplemental Fig 1: Major fast excitatory and inhibitory synaptic transmission was blocked effectively by a cocktail of kynurenic acid, strychnine and bicuculline in the in situ preparation. Establishment of synaptic blockade was shown by abolition of phrenic nerve activity (PNA), cessation of inspiratory related synaptic drive potentials in the inspiratory neuron and complete blockade of electrically evoked, short latency excitatory synaptic response. Note that despite blocking neuronal firing, the neuron responded to injection of depolarising current indicating that the neuron was still present. All drugs were from Sigma. Abbreviations: \( \int PNA \), integrated phrenic nerve discharge; NTS, nucleus tractus solitarii.