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Ex vivo electrophysiology

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We use this protocol and it's working

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Abstract

Ex vivo electrophysiology in Serra et al. 2022

Ex vivo electrophysiology

- 1 Briefly, mice (>12 months) were deeply anesthetized with an i.p. injection of ketamine/xylazine (75/10 mg/kg) mixture and then perfused trans-cardially with ice-cold (0C–4C) modified artificial cerebrospinal fluid (ACSF), equilibrated with 95% O₂ and 5% CO₂, and containing (in mM): 230 sucrose, 26 NaHCO₃, 2.5 KCl, 1.25 NaH₂PO₄, 0.5 CaCl₂, 10 MgSO₄ and 10 glucose. (pH 7.35).
- 2 The brain was quickly removed, glued to the stage of a Leica VT1200S vibratome (Leica, Germany), immersed in the ice-cold ACSF and sectioned into 300 µm thick parasagittal slices.
- 3 Slices containing the LHb, the STN and the VP/EP were then incubated for 1 h to a standard oxygenated ACSF solution, warmed (35C) containing (in mM unless otherwise stated): 126 NaCl, 26 NaHCO₃, 2.5 KCl, 1.25 NaH₂PO₄, 2 CaCl₂, 2 MgSO₄, 10 glucose, 1 sodium pyruvate and 4.9 mM L-gluthathione reduced. Single slices were then transferred to a recording chamber at room temperature 22C–26C and perfused continuously with oxygenated ACSF.