

## Catalog # 10-2416 Flupirtine maleate

CAS# 75507-68-5 D9998:

N-[2-Amino-6-[[(4-fluorophenyl)methyl]amino]-3-pyridinyl]carbamic acid ethyl ester maleate Lot # X101915

$$\begin{array}{c|c} & & & \\ & & & \\ N & & \\ N & & \\ N & & \\ NH_2 & & \\ C_4H_4O_4 & & \\ \end{array}$$

Activates K<sub>V</sub>7 potassium channels<sup>1</sup>, indirectly antagonizes NMDA receptors and modulates GABA<sub>A</sub> receptors<sup>2</sup>. Displays neuroprotective actions in a model of cerebral ischemia in mice and reduces apoptosis and necrosis induced by noxious stimuli. Analgesic activity.<sup>3</sup> Active *in vivo*.

- 1) Azad et al. (2004), The potassium channel modulator flupirtine shifts the frequency-response function of hippocampal synapses to favour LTD in mice; Neuro. Sci. Lett., **370** 186
- 2) Klinger et al. (2012), Concomitant facilitation of GABAA receptors and KV7 channels by the non-opioid analgesic flupirtine; Br. J. Pharmacol., **166** 1631
- 3) Osbourne et al. (1998), Flupirtine, a nonopioid centrally acting analgesic, acts as an NMDA antagonist, Gen. Pharmacol., **30** 255

## **PHYSICAL DATA**

Molecular Weight: 420.39

Molecular Formula: C<sub>15</sub>H<sub>17</sub>FN<sub>4</sub>O<sub>2</sub> · C<sub>4</sub>H<sub>4</sub>O<sub>4</sub>

Purity: 98% by TLC

NMR: (Conforms)

Solubility: DMSO (up to 40 mg/ml) or Ethanol (up to 4 mg/ml)

Physical Description: White solid

Storage and Stability: Store as supplied at room temperature for up to 2 years from the date of purchase. Solutions in

DMSO or ethanol may be stored at -20°C for up to 3 months.

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