

**Catalog # 10-2728**

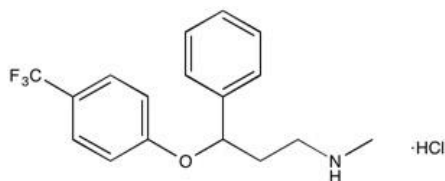
**Fluoxetine HCl**

CAS# 56296-78-7

LY-110,140

(±)-N-Methyl-γ-[4-(trifluoromethyl)phenoxy]benzenepropanamine hydrochloride

Lot # X101492



A selective serotonin reuptake inhibitor (SSRI) with high selectivity for the serotonin transporter ( $K_d=0.81$  nM) over the norepinephrine ( $K_d=240$  nM) and dopamine ( $K_d=3.6$  μM) transporters.<sup>1</sup> A clinically useful antidepressive agent.<sup>2</sup> Has shown some potential in autism spectrum disorders.<sup>3</sup> Attenuates neuroinflammation in early brain injury after subarachnoid hemorrhage.<sup>4</sup> Orally active and active *in vivo*. Increases proliferation of neuronal precursors derived from human embryonic stem cells, inducing differentiation and strongly enhancing neuronal characteristics.<sup>5</sup>

- 1) Tatsumi *et al.* (1997), *Pharmacological profile of antidepressants and related compounds at human monoamine transporters*; Eur. J. Pharmacol., **340** 249
- 2) Benfield *et al.* (1986), *Fluoxetine. A review of its pharmacodynamic and pharmacokinetic properties, and therapeutic efficacy in depressive illness*; Drugs, **32** 481
- 3) Benvenuto *et al.* (2013), *Pharmacotherapy of autism spectrum disorders*; Brain Dev., **35** 119
- 4) Liu *et al.* (2018), *Fluoxetine attenuates neuroinflammation in early brain injury after subarachnoid hemorrhage: a possible role for the regulation of TLR4/MyD88/NFκB signaling pathway*; J. Neuroinflammation, **15** 347
- 5) Chang *et al.* (2010), *Increased cellular turnover in response to fluoxetine in neuronal precursors derived from human embryonic stem cells*; Prog. Int. J. Dev. Biol., **54** 707

**PHYSICAL DATA**

Molecular Weight:	345.79
Molecular Formula:	C <sub>17</sub> H <sub>18</sub> F <sub>3</sub> NO · HCl
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 35 mg/ml) or Water (up to 4 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at room temperature for up to 2 years from the date of purchase. Solutions in DMSO or distilled water may be stored at -20°C for up to 3 months.

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