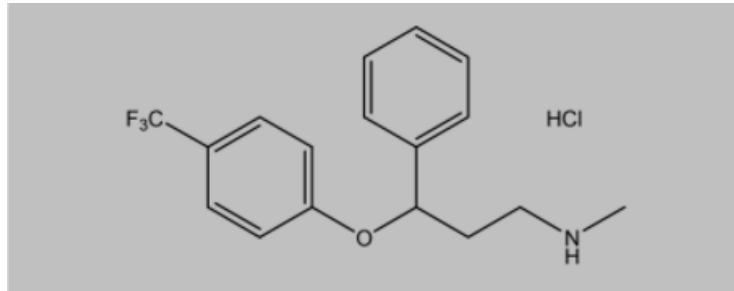


Fluoxetine hydrochloride

Cat# NB-48-0410

***N*-Methyl-3-phenyl-3-(4-(trifluoromethyl)phenoxy)propylamine
hydrochloride;
Prozac**



1. PHYSICAL AND CHEMICAL PROPERTIES

Batch No.: 0197BG/04

Batch Molecular Formula: C₁₇H₁₈F₃NO .HCl

Batch Molecular Weight: 345.79

CAS No.: [59333-67-4]

Physical Appearance: White solid

Melting Point: 156 - 158° C

Solubility: Soluble to 10 mM in water or to 100 mM in DMSO

Storage: RT

Product Description: **Selective Serotonin Reuptake Inhibitor (SSRI) and antidepressant. Binds to the human Serotonin Transporter (SERT) with a K_i of 0.9 nM. Displays 150- and 900-fold selectivity over 5-HT_{1A}, 5-HT_{2A}, Histamine H₁, α₁-, α₂-adrenergic and muscarinic receptors. Inhibits Cytochrome P450 CYP2C19, 2D6, 3A4, 3A5 and 3A7. Also exhibits potent antiinflammatory activity in human and murine models of Rheumatoid Arthritis and inhibits Toll-Like Receptors. Recently, it was shown that Fluoxetine treatment acts directly on raphe neurons to antagonize canonical Wnt signalling and enhance miR-16 maturation, thus inducing a downregulation of SERT and prolonging serotonergic signalling.**

References:

1. Benfield et al. (1986) *Drugs* 32:481; 2. Owens et al. (1997) *J Pharmacol Exp Ther* 283:1305; 3. Sacre et al. (2010) *Arthritis Rheum* 62:683; 4. Baudry et al. (2010) *Science* 329:1537; 5. Sandoz et al. (2011) *Proc Natl Acad Sci USA* 108:2605

2. ANALYTICAL DATA

HPLC: corresponds to the reference

MS: corresponds to the reference

Tests: Heavy Metals: < 20 ppm (complies); Optical rotation: +0.0° (complies); HPLC Assay: > 99% (complies).