BIOTREND Chemicals AG
Unterdorfstr. 21
CH-8602 Wangen / Zurich
Switzerland
Tel + 41 44 805 76 76
Fax +41 44 805 76 77
Email: techserv@biotrend.ch
www.biotrend.ch

Certificate Of Analysis

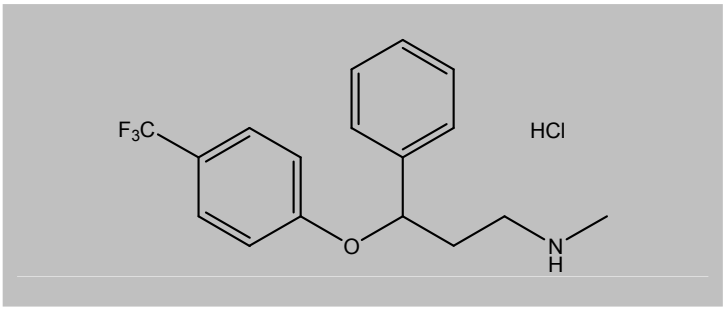
Quality Control Testing and Research Application

COA Preparation Date: 19/09/2013
COA Revision Date: 19/09/2016

Product:	**Fluoxetine hydrochloride**
Cat. No.:	BG0197
Batch No.:	0197BG/02
Chemical Name:	*N*-Methyl-3-phenyl-3-(4-(trifluoromethyl)phenoxy)propylamine hydrochloride; Prozac

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	$C_{17}H_{18}F_3NO$ .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
Batch Molecular Structure:	



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 H_1, α_1-, α_2-adrenergic and muscarinergic 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

BIOTREND Chemicals AG
Unterdorfstr. 21
CH-8602 Wangen / Zurich
Switzerland
Tel + 41 44 805 76 76
Fax +41 44 805 76 77
Email: techserv@biotrend.ch
www.biotrend.ch

Certificate Of Analysis

Quality Control Testing and Research Application

COA Preparation Date: 19/09/2013
COA Revision Date: 19/09/2016

BG0197 Fluoxetine hydrochloride

2. ANALYTICAL DATA

HPLC:	corresponds to the reference
MS:	corresponds to the reference
Tests:	Heavy Metals: < 20 ppm (complies); HPLC Assay: > 99% (complies).