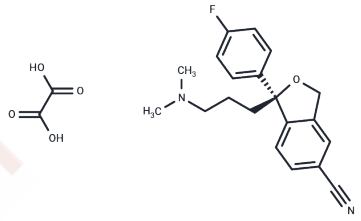
Data Sheet (Cat.No.T6493)

TargetMol

Escitalopram Oxalate

Chemical Properties



CAS No. : 219861-08-2

Formula: C22H23FN2O5

Molecular Weight: 414.43

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Escitalopram Oxalate ((S)-(+)Citalopram oxalate) is a selective serotonin (5-HT) reuptake inhibitor (SSRI) with Ki of 0.89 nM.
Targets(IC50)	5-HT Receptor,Serotonin Transporter
In vitro	Escitalopram, the S-enantiomer of citalopram, belongs to a class of antidepressant agents known as selective serotonin-reuptake inhibitors (SSRIs). It is used to treat the depression associated with mood disorders. It is also used on occassion in the treatment of body dysmorphic disorder and anxiety. The antidepressant, antiobsessive-compulsive, and antibulimic actions of escitalopram are presumed to be linked to its inhibition of CNS neuronal uptake of serotonin.In vitro studies show that escitalopram is a potent and selective inhibitor of neuronal serotonin reuptake and has only very weak effects on norepinephrine and dopamine neuronal reuptake. Escitalopram has no significant affinity for adrenergic (alpha1, alpha2, beta), cholinergic, GABA, dopaminergic, histaminergic, serotonergic (5HT1A, 5HT1B, 5HT2), or benzodiazepine receptors; antagonism of such receptors has been hypothesized to be associated with various anticholinergic, sedative, and cardiovascular effects for other psychotropic drugs. The chronic administration of escitalopram is found to downregulate brain norepinephrine receptors, as has been observed with other drugs effective in the treatment of major depressive disorder. Escitalopram does not inhibit monoamine oxidase.

Solubility Information

Solubility	H2O: 20.7 mg/mL (49.95 mM),Sonication is recommended. DMSO: 50 mg/mL (120.65 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.413 mL	12.0648 mL	24.1295 mL
5 mM	0.4826 mL	2.413 mL	4.8259 mL
10 mM	0.2413 mL	1.2065 mL	2.413 mL
50 mM	0.0483 mL	0.2413 mL	0.4826 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Mnie-Filali O, et al. Encephale, 2007, 33(6), 965-972.
Zhang P, et al. J Med Chem, 2010, 53(16), 6112-6121.