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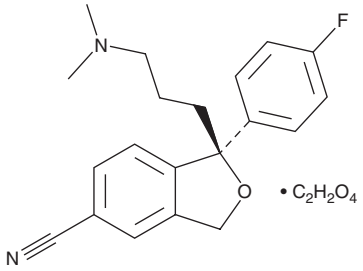
PRODUCT INFORMATION

Escitalopram (oxalate)

Item No. 39841

CAS Registry No.:	219861-08-2
Formal Name:	(1S)-1-[3-(dimethylamino)propyl]-1-(4-fluorophenyl)-1,3-dihydro-5-isobenzofurancarbonitrile, monoethanedioate
Synonyms:	(S)-Citalopram, Lu 26-054-0
MF:	$C_{20}H_{21}FN_2O \bullet C_2H_2O_4$
FW:	414.4
Purity:	≥98%
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Escitalopram (oxalate) is supplied as a solid. A stock solution may be made by dissolving the escitalopram (oxalate) in the solvent of choice, which should be purged with an inert gas. Escitalopram (oxalate) is sparingly soluble (1-10 mg/ml) in DMSO.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of escitalopram (oxalate) can be prepared by directly dissolving the solid in aqueous buffers. Escitalopram (oxalate) is sparingly soluble (1-10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

Escitalopram is a selective serotonin (5-HT) reuptake inhibitor (SSRI) and the (S) isomer of citalopram (Item No. 14572) and (R)-citalopram.[1] It selectively binds to SERT (K_i = 0.89 nM) over the norepinephrine and dopamine transporters (K_is = >10,000 and 8,150 nM, respectively) and inhibits 5-HT reuptake in rat brain synaptosomes (IC_{50} = 2.1 nM).[2,3] Escitalopram reduces immobility in the forced swim test in mice (ED_{50} = 12 mg/kg), indicating anti-depressant-like activity, and increases exploratory behavior in the black-and-white box test in mice with a minimal effective dose (MED) of 0.49 mg/kg, indicating anxiolytic-like activity.[4] Escitalopram (20 µM) prevents acid sphingomyelinase activation and subsequent ceramide release induced by infection with replication-deficient vesicular stomatitis virus pseudoviral particles (pp-VSV) presenting the severe acute respiratory coronavirus 2 (SARS-CoV-2) spike protein in Vero cells, an effect that can be overcome with exogenous application of C16 ceramide (Item No. 10681).[5] Formulations containing escitalopram have been used in the treatment of major depressive disorder (MDD) and generalized anxiety disorder (GAD).

References

1. Höschl, C. and Svestka, J. *Expert Rev. Neurother.* **8(4),** 537-552 (2008).
2. Zhang, P., Cyriac, G., Kopajtic, T., *et al. J. Med. Chem.* **53(16),** 6112-6121 (2010).
3. Sánchez, C., Bøgesø, K.P., Ebert, B., *et al. Psychopharmacology (Berl)* **174(2),** 163-176 (2004).
4. Sánchez, C., Bergqvist, P.B.F., Brennum, L.T., *et al. Psychopharmacol. (Berl)* **167(4),** 353-362 (2003).
5. Carpinteiro, A., Edwards, M.J., Hoffmann, M., *et al. Cell Rep. Med.* **1(8),** 100142 (2020).

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