PRODUCT INFORMATION

Escitalopram
Item No. 22405

CAS Registry No.: 128196-01-0
Formal Name: (1S)-1-[3-(dimethylamino)propyl]-1-(4-fluorophenyl)-1,3-dihydro-5-isobenzofurancarbonitrile
Synonym: (S)-Citalopram
MF: C_{20}H_{21}FN_2O
FW: 324.4
Purity: ≥98%
UV/Vis.: \( \lambda_{\text{max}} \): 241 nm
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥1 year

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

Laboratory Procedures

Escitalopram is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of escitalopram in these solvents is approximately 20, 33, and 25 mg/ml, respectively.

Escitalopram is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of escitalopram should be diluted with the aqueous buffer of choice. Escitalopram has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method.

Description

Escitalopram ((S)-citalopram) is a selective serotonin reuptake inhibitor.\(^1\) It blocks serotonin reuptake in rat brain synaptosomes (IC\(_{50}\) = 2.1 nM) without affecting norepinephrine or dopamine reuptake.\(^2\) Escitalopram is more potent than the racemic mixture citalopram (Item No. 14572) or (R)-citalopram (IC\(_{50}\) = 3.9 and 280 nM, respectively).\(^3\) Formulations containing escitalopram have been used to treat anxiety in depressive disorders, post-traumatic stress disorder (PTSD), obsessive compulsive disorder (OCD) and panic disorders.\(^1\)

References