Sertraline (hydrochloride)

Item No. 14839

CAS Registry No.: 79559-97-0

Formal Name: (1S,4S)-4-(3,4-dichlorophenyl)-1,2,3,4-tetrahydro-N-methyl-1-naphthalenamine, monohydrochloride

Synonyms: CP 51,974-1, Lustral, Sesorine, Zoloft™

MF: C_{17}H_{17}Cl_{2}N • HCl

FW: 342.7

Purity: ≥95%

Stability: ≥2 years at -20°C

Supplied as: A crystalline solid

Laboratory Procedures

For long term storage, we suggest that sertraline (hydrochloride) be stored as supplied at -20°C. It should be stable for at least two years.

Sertraline (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the sertraline (hydrochloride) in the solvent of choice. Sertraline (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of sertraline (hydrochloride) in ethanol is approximately 5 mg/ml and approximately 16 mg/ml in DMSO and DMF.

Sertraline (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, sertraline (hydrochloride) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Sertraline (hydrochloride) has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO/PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Sertraline is a tetratine that inhibits monoamine transporters with selectivity for the serotonin transporter (IC_{50} s= 70, 520, and 720 nM for the serotonin, dopamine, and norepinephrine transporters, respectively).\(^1\) It is classified as a selective serotonin reuptake inhibitor. Formulations containing sertraline are applicable to depression and related disorders.\(^2,3\)

References

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/14839