

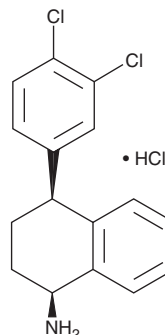
# PRODUCT INFORMATION



## (1S,4S)-N-desmethyl Sertraline (hydrochloride)

Item No. 15916

**CAS Registry No.:** 675126-10-0  
**Formal Name:** 4S-(3,4-dichlorophenyl)-1S,2,3,4-tetrahydro-N-methyl-1-naphthalenamine, monohydrochloride  
**Synonyms:** *cis*(1S,4S)-Norsertaline, CP 62,508, (1S,4S)-Norsertaline  
**MF:** C<sub>16</sub>H<sub>15</sub>Cl<sub>2</sub>N • HCl  
**FW:** 328.7  
**Purity:** ≥95%  
**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

(1S,4S)-N-desmethyl Sertraline (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the (1S,4S)-N-desmethyl sertraline (hydrochloride) in the solvent of choice, which should be purged with an inert gas. (1S,4S)-N-desmethyl Sertraline (hydrochloride) is soluble in DMSO. (1S,4S)-N-desmethyl Sertraline (hydrochloride) is slightly soluble in acetonitrile.

(1S,4S)-N-desmethyl Sertraline (hydrochloride) is slightly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

### Description

(1S,4S)-N-desmethyl Sertraline is a metabolite of the selective serotonin reuptake inhibitor (SSRI) sertraline (Item No. 14839).<sup>1</sup> (1S,4S)-N-desmethyl Sertraline inhibits serotonin (5-HT) and dopamine (DA) uptake in isolated rat corpus striatum (IC<sub>50</sub>s = 0.45 and 3.8 μM, respectively) and norepinephrine (NE) uptake in isolated rat hypothalamus (IC<sub>50</sub> = 4.6 μM).<sup>2</sup> Unlike sertraline, (1S,4S)-N-desmethyl sertraline (1, 3.2, and 10 mg/kg) does not increase extracellular levels of 5-HT or decrease extracellular levels of the serotonin metabolite 5-hydroxy indole-3-acetic acid (5-HIAA) in the rat striatum.<sup>3</sup> It also does not increase cell firing in the rat dorsal raphe when administered intravenously at a dose of 1,000 μg/kg.

### References

1. Bolden-Watson, C. and Richelson, E. Blockade by newly-developed antidepressants of biogenic amine uptake into rat brain synaptosomes. *Life Sci.* **52**(12), 1023-1029 (1993).
2. Koe, B.K., Weissman, A., Welch, W.M., *et al.* Sertraline, 1S,4S-N-methyl-4-(3,4-dichlorophenyl)-1,2,3,4-tetrahydro-1-naphthylamine, a new uptake inhibitor with selectivity for serotonin. *J. Pharmacol. Exp. Ther.* **226**(3), 686-700 (1983).
3. Sprouse, J., Clarke, T., Reynolds, L., *et al.* Comparison of the effects of sertraline and its metabolite desmethylsertraline on blockade of central 5-HT reuptake in vivo. *Neuropsychopharmacology* **14**(4), 225-231 (1996).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM