

PRODUCT INFORMATION



SB-699551 (hydrochloride)

Item No. 42517

Formal Name: 3-cyclopentyl-N-(2-(dimethylamino)ethyl)-N-((4'-(phenethylamino)methyl)-[1,1'-biphenyl]-4-yl)methyl)propanamide, hydrochloride

MF: $C_{34}H_{45}N_3O \cdot XHCl$

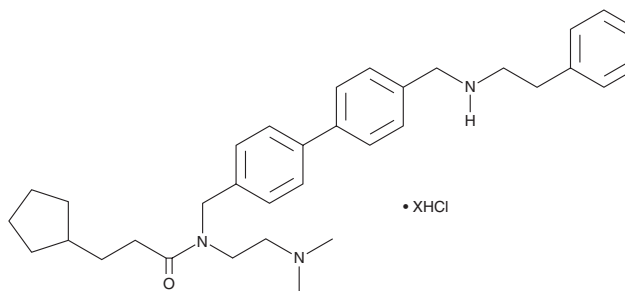
FW: 511.8

Purity: $\geq 95\%$

Supplied as: A solid

Storage: $-20^{\circ}C$

Stability: ≥ 4 years



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

Laboratory Procedures

SB-699551 (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the SB-699551 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. SB-699551 (hydrochloride) is soluble (≥ 10 mg/ml) in DMSO. SB-699551 (hydrochloride) is slightly soluble (0.1-1 mg/ml) in acetonitrile.

SB-699551 (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

SB-699551 is an antagonist of the serotonin (5-HT) receptor subtype 5-HT_{5A} ($K_i = 6.31$ nM).¹ It is selective for 5-HT_{5A} over a panel of 14 other receptors (K_i s = >315 nM for all) but does inhibit the serotonin transporter (SERT; $K_i = 25.12$ nM). SB-699551 also decreases sphere formation in patient-derived xenograft (PDX) breast cancer cells ($IC_{50} = 596$ nM).² It decreases tumor volume in combination with docetaxel (Item No. 11637) in a PDX mouse model of breast cancer. SB-699551 inhibits cued fear conditioning in mice ($ED_{50} = 25.4$ mg/kg).³

References

1. Corbett, D.F., Heightman, T.D., Moss, S.F., *et al.* Discovery of a potent and selective 5-HT_{5A} receptor antagonist by high-throughput chemistry. *Bioorg. Med. Chem. Lett.* **15**(18), 4014-4018 (2005).
2. Gwynne, W.D., Shakeel, M.S., Girgis-Gabardo, A., *et al.* Antagonists of the serotonin receptor 5A target human breast tumor initiating cells. *BMC Cancer* **20**(1), 724 (2020).
3. Kassai, F., Schlumberger, C., Kedves, R., *et al.* Effect of 5-HT_{5A} antagonists in animal models of schizophrenia, anxiety and depression. *Behav. Pharmacol.* **23**(4), 397-406 (2012).

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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