

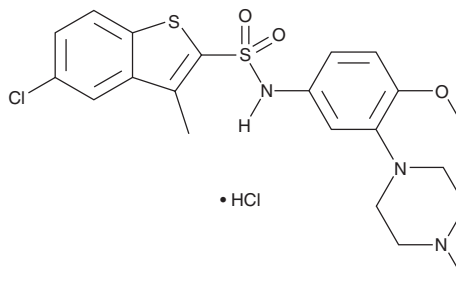
PRODUCT INFORMATION



SB-271046 (hydrochloride)

Item No. 18513

CAS Registry No.: 209481-24-3
Formal Name: 5-chloro-N-[4-methoxy-3-(1-piperazinyl)phenyl]-3-methylbenzo[b]thiophene-2-sulfonamide, monohydrochloride
MF: C₂₀H₂₂ClN₃O₃S₂ • HCl
FW: 488.4
Purity: ≥95%
UV/Vis.: λ_{max}: 211, 241, 282 nm
Supplied as: A crystalline 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

SB-271046 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the SB-271046 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. SB-271046 (hydrochloride) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of SB-271046 (hydrochloride) in these solvents is approximately 10 and 3 mg/ml, respectively.

SB-271046 (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SB-271046 (hydrochloride) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. SB-271046 (hydrochloride) has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

SB-271046 is an orally-available antagonist of the serotonin (5-hydroxytryptamine, or 5-HT; Item No. 14332) receptor 5-HT₆ (pK_i = 9.02-8.92).^{1,2} It is at least 100-fold selective for 5-HT₆ over other 5-HT receptors, as well as 55 other receptors, enzymes, and ion channels.² While it does not alter basal levels of 5-HT, dopamine, or noradrenaline, SB-271046 produces a significant increase in extracellular levels of glutamate and aspartate within the frontal cortex.³ It has been used to evaluate the role of 5-HT₆ in learning and memory.⁴

References

1. Bromidge, S.M., Brown, A.M., Clarke, S.E., et al. *J. Med. Chem.* **42**(2), 202-205 (1999).
2. Routledge, C., Bromidge, S.M., Moss, S.F., et al. *Br. J. Pharmacol.* **130**, 1606-1612 (2000).
3. Dawson, L.A., Nguyen, H.Q., and Li, P. *Brit. J. Pharmacol.* **130**, 23-26 (2000).
4. Woods, S., Clarke, N.N., Layfield, R., et al. *Brit. J. Pharmacol.* **167**, 436-449 (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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