# PRODUCT INFORMATION



# SB-224289 (hydrochloride)

Item No. 17036

CAS Registry No.: 180084-26-8

Formal Name: [2'-methyl-4'-(5-methyl-1,2,4-

oxadiazol-3-yl)[1,1'-biphenyl]-4-yl] (2,5,6,7-tetrahydro-1'-methylspiro[3Hfuro[2,3-f]indole-3,4'-piperidin]-5-yl)-

methanone, monohydrochloride

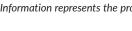
 $C_{32}H_{32}N_4O_3 \bullet HCI$  557.1 MF:

FW: **Purity:** ≥98%

UV/Vis.:  $\lambda_{max}$ : 270 nm A crystalline solid Supplied as:

-20°C Storage: Stability: ≥4 years

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



# **Laboratory Procedures**

SB-224289 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the SB-224289 (hydrochloride) in the solvent of choice. SB-224289 (hydrochloride) is soluble in the organic solvent DMSO, which may require gently warming and should be purged with an inert gas, at a concentration of approximately 5 mg/ml.

SB-224289 (hydrochloride) is sparingly 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

The transduction of neurobehavioral effects by serotonin (5-hydroxy tryptamine; 5-HT) is mediated by at least seven major 5-HT receptor subtypes. SB-224289 is a potent 5-HT $_{1B}$  inverse agonist (pK $_{i}$  = 8.16) that displays >75-fold selectivity for human 5-HT<sub>1B</sub> over all other 5-HT receptors. 1 It has been used to study the role of 5-HT<sub>1B</sub> receptors in cocaine self-administration and cocaine-seeking behavior.<sup>2</sup>

#### References

- 1. Selkirk, J.V., Scott, C., Ho, M., et al. SB-224289 A novel selective (human) 5-HT1B receptor antagonist with negative intrinsic activity. Br. J. Pharmacol. 125(1), 202-208 (1998).
- 2. Pentkowski, N.S., Harder, B.G., Brunwasser, S.J., et al. Pharmacological evidence for an abstinenceinduced switch in 5-HT<sub>1R</sub> receptor modulation of cocaine self-administration and cocaine-seeking behavior. ACS Chem. Neurosci. 5(3), 168-176 (2014)

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

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.

## WARRANTY AND LIMITATION OF REMEDY

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