PRODUCT INFORMATION



SB-242084 (hydrochloride)

Item No. 10096

CAS Registry No.: 1049747-87-6

Formal Name: 6-chloro-2,3-dihydro-5-methyl-

> N-[6-[(2-methyl-3-pyridinyl) oxy]-3-pyridinyl]-1H-indole-1carboxamide, dihydrochloride

C₂₁H₁₉CIN₄O₂ • 2HCI MF:

FW: 467.8 **Purity:** ≥98%

Stability: ≥2 years at -20°C Supplied as: A crystalline solid UV/Vis.: λ_{max} : 212, 265 nm

Laboratory Procedures

For long term storage, we suggest that SB-242084 (hydrochloride) be stored as supplied at -20°C. It should be stable for at least two years.

SB-242084 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the SB-242084 (hydrochloride) in the solvent of choice. SB-242084 (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 SB-242084 (hydrochloride) in ethanol is approximately 1 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of SB-242084 (hydrochloride) can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of SB-242084 (hydrochloride) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Serotonin (5-hydroxytryptamine, 5-HT) is a neurotransmitter that activates specific receptors located primarily in the gut and central nervous system. SB-242084 is an antagonist of the 5-HT_{2C} receptor $(pK_i = 9.0)$, with at least 100-fold more selectivity over other 5-HT, dopamine, or adrenergic receptors.^{1,2} In vivo, it is brain penetrant and has significant anxiolytic activity, without sedative, proconvulsant, or hyperphagic properties. SB-242084 has been used extensively in animal research to evaluate, for example, 5-HT_{2C} receptor agonists and neurotransmitter receptor interactions in mice.³⁻⁵

References

- 1. Kennett, G.A., Wood, M.D., Bright, F., et al. Neuropharmacology 36(4/5), 609-620 (1997).
- 2. Bromidge, S.M., Duckworth, M., Forbes, I.T., et al. J. Med. Chem. 40, 3494-3496 (1997).
- 3. Fletcher, P.J., Tampakeras, M., Sinyard, J., et al. Neuropharmacology 57, 259-267 (2009).
- 4. Fletcher, P.J., Sinyard, J., and Higgins, G.A. Psychopharmacology 187, 515-525 (2006).
- 5. Dalton, G.L., Lee, M.D., Kennett, G.A., et al. Psychopharmacology 185, 45-47 (2006).

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

al 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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