

PRODUCT INFORMATION



(-)-WIN 55,212-3 (mesylate)

Item No. 12022

CAS Registry No.: 131543-25-4
Formal Name: [(3S)-2,3-dihydro-5-methyl-3-(4-morpholinylmethyl)pyrrolo[1,2,3-de]-1,4-benzoxazin-6-yl]-1-naphthalenyl-methanone, methanesulfonate

MF: C₂₇H₂₆N₂O₃ • CH₃SO₃H
FW: 522.6

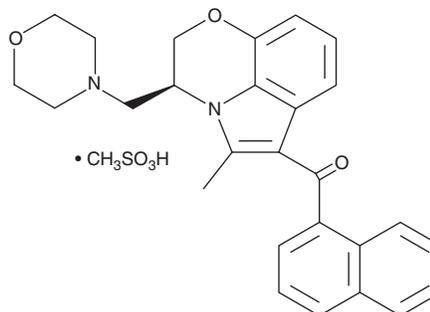
Purity: ≥98%

UV/Vis.: λ_{max}: 219, 246, 330 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

(-)-WIN 55,212-3 (mesylate) is supplied as a crystalline solid. A stock solution may be made by dissolving the (-)-WIN 55,212-3 (mesylate) in the solvent of choice, which should be purged with an inert gas. (-)-WIN 55,212-3 (mesylate) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of (-)-WIN 55,212-3 (mesylate) in ethanol is approximately 5 mg/ml and approximately 30 mg/ml in DMSO and DMF.

(-)-WIN 55,212-3 (mesylate) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, (-)-WIN 55,212-3 (mesylate) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. (-)-WIN 55,212-3 (mesylate) has a solubility of approximately 0.25 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

(-)-WIN 55,212-3 is an aminoalkylindole derivative which acts as a competitive neutral antagonist of the human cannabinoid CB₂ receptor, blocking both the stimulating action of CP 55,940 (pA₂ = 6.1) and the inverse agonism of SR 144528 (Item No. 9000491) (pEC₅₀ = 5.3).¹ (-)-WIN 55,212-3 neither antagonizes nor mimics the effects of Δ⁹-THC on rat cerebellar membranes, which presumably express the CB₁ receptor.^{2,3} (-)-WIN 55,212-3 also weakly antagonizes the melatonin MT₁ and muscarinic M₄ receptors but has no effect on several other G protein-coupled receptors.¹

References

1. Savinainen, J.R., Kokkola, T., Salo, O.M.H., *et al.* Identification of WIN55212-3 as a competitive neutral antagonist of the human cannabinoid CB₂ receptor. *Br. J. Pharmacol.* **145**(5), 636-645 (2005).
2. Pacheco, M., Childers, S.R., Arnold, R., *et al.* Aminoalkylindoles: Actions on specific G-protein-linked receptors. *J. Pharmacol. Exp. Ther.* **257**(1), 170-183 (1991).
3. Compton, D.R., Gold, L.H., Ward, S.J., *et al.* Aminoalkylindole analogs: Cannabimimetic activity of a class of compounds structurally distinct from Δ⁹-tetrahydrocannabinol. *J. Pharmacol. Exp. Ther.* **263**(3), 1118-1126 (1992).

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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