(-)-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-benzazin-6-yl]-1-naphthalenyl-methanone, methanesulfonate
MF: C_{27}H_{26}N_{2}O_{3} \cdot CH_{3}SO_{3}H
FW: 522.6
Purity: ≥98%
UV/Vis.: λ_{max}: 219, 246, 330 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 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 CB_2 receptor, blocking both the stimulating action of CP 55,940 (pA_2 = 6.1) and the inverse agonism of SR 144528 (Item No. 9000491) (pEC_{50} = 5.3).\(^1\) (-)-WIN 55,212-3 neither antagonizes nor mimics the effects of Δ^2-THC on rat cerebellar membranes, which presumably express the CB_1 receptor.\(^2,3\) (-)-WIN 55,212-3 also weakly antagonizes the melatonin MT_1 and muscarinic M_4 receptors but has no effect on several other G protein-coupled receptors.\(^1\)

References