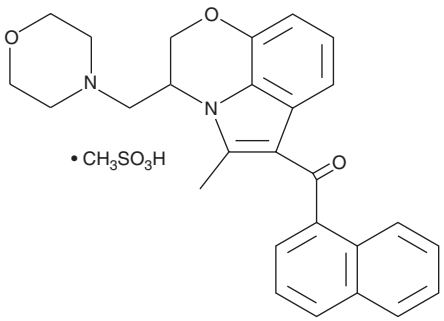
PRODUCT INFORMATION

(±)-WIN 55,212 (mesylate)

Item No. 10736

CAS Registry No.: 137795-17-6
Formal Name: [2,3-dihydro-5-methyl-3-(4-morpholinylmethyl)pyrrolo[1,2,3-de]-1,4-benzoxazin-6-yl]-1-naphthalenyl-methanone, methanesulfonate
MF: $C_{27}H_{26}N_2O_3 \bullet CH_3SO_3H$
FW: 522.6
Purity: ≥98%
UV/Vis.: λ_{max}: 220, 331 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 (mesylate) is supplied as a crystalline solid. A stock solution may be made by dissolving the (±)-WIN 55,212 (mesylate) in the solvent of choice, which should be purged with an inert gas. (±)-WIN 55,212 (mesylate) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of (±)-WIN 55,212 (mesylate) in ethanol is approximately 5 mg/ml and approximately 30 mg/ml in DMSO and DMF.

(±)-WIN 55,212 (mesylate) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, (±)-WIN 55,212 (mesylate) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. (±)-WIN 55,212 (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 is a racemic mixture of the cannabinoid (CB) receptor 1 (CB_1) and CB_2 agonist (+)-WIN 55,212-2 (Item No. 10009023) and the CB_2 neutral antagonist (−)-WIN 55,212-3 (Item No. 12022).[1] It inhibits electrically induced contractions in mouse vas deferens preparations (IC_{50} = 0.006 µM) and reduces prostaglandin (PG) synthesis by 35% in mouse brain microsomes when used at a concentration of 30 µM.[2] (±)-WIN 55,212 decreases acetylcholine-induced writhing in mice with an ED_{50} value of 0.25 mg/kg. It induces hypolocomotion, analgesia, hypothermia, and catalepsy in mice (ED_{50}s = 1.09, 0.5, 3.01 and 6.8 mg/kg, respectively).[3]

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 CB_2 receptor. *Br. J. Pharmacol.* **145(5)**, 636-645 (2005).
2. D'Ambra, T.E., Estep, K.G., Bell, M.R., *et al.* Conformationally restrained analogues of pravadoline: Nanomolar potent, enantioselective, (aminoalkyl)indole agonists of the cannabinoid receptor. *J. Med. Chem.* **35(1)**, 124-135 (1992).
3. Fan, F., Compton, D.R., Ward, S., *et al.* Development of cross-tolerance between Δ^9-tetrahydrocannabinol, CP 55,940 and WIN 55,212. *J. Pharmacol. Exp. Ther.* **271(3)**, 1383-1390 (1994).

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