

PRODUCT INFORMATION

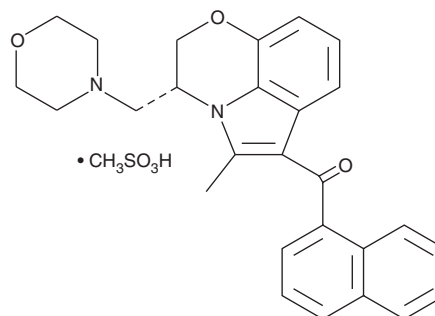


(+)-WIN 55,212-2 (mesylate)

Item No. 10009023

CAS Registry No.: 131543-23-2
Formal Name: [(3R)-2,3-dihydro-5-methyl-3-(4-morpholinylmethyl)pyrrolo[1,2,3-de]-1,4-benzoxazin-6-yl]-1-naphthalenyl-methanone, monomethanesulfonate

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 55,212-2 (mesylate) is supplied as a crystalline solid. A stock solution may be made by dissolving the (+)-WIN 55,212-2 (mesylate) in the solvent of choice, which should be purged with an inert gas. (+)-WIN 55,212-2 (mesylate) is soluble in the organic solvent dimethyl formamide (DMF) at a concentration of approximately 30 mg/ml.

(+)-WIN 55,212-2 (mesylate) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, (+)-WIN 55,212-2 (mesylate) should first be dissolved in DMF and then diluted with the aqueous buffer of choice. (+)-WIN 55,212-2 (mesylate) has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

(+)-WIN 55,212-2 (mesylate) is a potent aminoalkylindole cannabinoid (CB) receptor agonist with K_i values of 62.3 and 3.3 nM for human recombinant CB₁ and CB₂ receptors, respectively.¹ In primary cultures of rat cerebral cortex neurons, (+)-WIN 55,212-2 (mesylate) (0.01-100 nM) increases extracellular glutamate levels, displaying a bell-shaped concentration-response curve.² This effect is fully counteracted by rimonabant (Item No. 9000484) at a concentration of 10 nM, by decreasing Ca²⁺ concentrations below 0.2 mM, or by the IP₃ receptor antagonist xestospongion C (Item No. 64950) at a concentration of 1 μM. (+)-WIN 55,212-2 (mesylate) induces release of the proinflammatory neuropeptide CGRP from trigeminal ganglion (TG) neurons in a calcium-dependent manner with an EC₅₀ value of 26 μM.³

References

1. Felder, C.C., Joyce, K.E., Briley, E.M., *et al.* Comparison of the pharmacology and signal transduction of the human cannabinoid CB₁ and CB₂ receptors. *Mol. Pharmacol.* **48**(3), 443-450 (1995).
2. Ferraro, L., Tomasini, M.C., Gessa, G.L., *et al.* The cannabinoid receptor agonist WIN 55,212-2 regulates glutamate transmission in rat cerebral cortex: An *in vivo* and *in vitro* study. *Cereb. Cortex* **11**(8), 728-733 (2001).
3. Price, T.J., Patwardhan, A., Akopian, A.N., *et al.* Cannabinoid receptor-independent actions of the aminoalkylindole WIN 55,212-2 on trigeminal sensory neurons. *Br. J. Pharmacol.* **142**(2), 257-266 (2004).

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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