

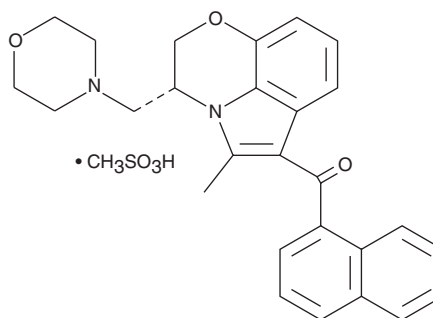
Product Information



WIN 55212-2 (mesylate)

Catalog 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-naphthalenylmethanone, monomethanesulfonate
MF: C₂₇H₂₆N₂O₃ • CH₄SO₃
FW: 522.6
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
Misc.: Hygroscopic



Laboratory Procedures

For long term storage, we suggest that WIN 55212-2 (mesylate) be stored as supplied at -20°C. It will be stable for at least two years.

WIN 55212-2 (mesylate) is supplied as a crystalline solid. A stock solution may be made by dissolving the WIN 55212-2 (mesylate) in an organic solvent purged with an inert gas. WIN 55212-2 (mesylate) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of WIN 55212-2 (mesylate) in ethanol is approximately 5 mg/ml and approximately 30 mg/ml in DMSO and DMF.

WIN 55212-2 (mesylate) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, WIN 55212-2 (mesylate) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. WIN 55212-2 (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.

WIN 55212-2 (mesylate) is a potent aminoalkylindole cannabinoid (CB) receptor agonist with a K_i of 3.3 and 62.3 nM for human recombinant CB₁ and CB₂ receptors, respectively.¹ In primary cultures of rat cerebral cortex neurons, WIN 55212-2 (mesylate) (0.01-100 nM) increases extracellular glutamate levels, displaying a bell-shaped concentration-response curve.² This effect at a concentration of 1 nM was fully counteracted by SR141716A (10 nM), by decreasing Ca²⁺ concentrations below 0.2 mM, and by the IP₃ receptor antagonist xestospongine C at 1 μM. WIN 55212-2 (mesylate) induces release of the proinflammatory neuropeptide CGRP from trigeminal ganglion (TG) neurons in a calcium-dependent manner with an EC₅₀ of 26 μM.³ In addition, WIN 55212-2 (mesylate)-evoked CGRP release is not stereospecific, as the CB receptor-inactive enantiomer WIN 55212-3 (mesylate) also stimulates CGRP exocytosis.

References

- 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**, 443-450 (1995)
- Ferraro, L., Tomasini, 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. *Cerebral Cortex* **11**, 728-733 (2001).
- 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**, 257-266 (2004).

Related Products

R-1 Methanandamide - Cat. No. 90070 • S-2 Methanandamide - Cat. No. 90076 • HU-210 (DEA Schedule I Regulated Compound) - Cat. No. 90082 • O-Arachidonoyl Ethanolamine (hydrochloride) - Cat. No. 91050 • CGRP (rat) EIA Kit - Cat. No. 589001 • CGRP (human) EIA Kit - Cat. No. 589101 • CAY10429 - Cat. No. 10004259 • Arachidonoyl-1-Thio-Glycerol - Cat. No. 10007904 • JWH 015 - Cat. No. 10009018

WARNING: THIS PRODUCT IS NOT INTENDED OR APPROVED FOR HUMAN OR VETERINARY USE. USE OF THIS PRODUCT FOR HUMAN OR ANIMAL TESTING IS EXTREMELY HAZARDOUS AND MAY RESULT IN DISEASE, SEVERE INJURY, OR DEATH.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent under separate cover to the MSDS supervisor at your institution.

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