

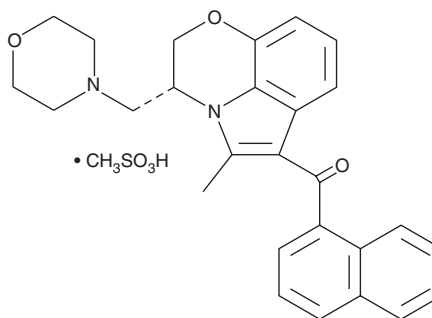
# Product Information



## (+)WIN 55212-2 (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:** C<sub>27</sub>H<sub>26</sub>N<sub>2</sub>O<sub>3</sub> • CH<sub>4</sub>SO<sub>3</sub>  
**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<sub>i</sub> of 62.3 and 3.3 nM for human recombinant CB<sub>1</sub> and CB<sub>2</sub> receptors, respectively.<sup>1</sup> 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.<sup>2</sup> This effect at a concentration of 1 nM was fully counteracted by SR141716A (10 nM), by decreasing Ca<sup>2+</sup> concentrations below 0.2 mM, and by the IP<sub>3</sub> receptor antagonist xestospingon 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 EC<sub>50</sub> of 26 μM.<sup>3</sup> 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

1. Felder, C.C., Joyce, K.E., Briley, E.M., *et al.* Comparison of the pharmacology and signal transduction of the human cannabinoid CB<sub>1</sub> and CB<sub>2</sub> receptors. *Mol. Pharmacol.* **48**, 443-450 (1995)
2. 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).
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**, 257-266 (2004).

### Related Products

JWH 018 2-hydroxyindole metabolite-d<sub>9</sub> - Item No. 10711 • JWH 020 - Item No. 10850 • LH 21 - Item No. 13453 • R-1 Methanandamide - Item No. 90070 • S-2 Methanandamide - Item No. 90076 • HU-210 (DEA Schedule I Regulated Compound) - Item No. 90082 • O-Arachidonoyl Ethanolamine (hydrochloride) - Item No. 91050 • CGRP (rat) EIA Kit - Item No. 589001 • CGRP (human) EIA Kit - Item No. 589101 • CAY10429 - Item No. 10004259 • Arachidonoyl-1-Thio-Glycerol - Item No. 10007904 • JWH 015 - Item No. 10009018

**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY. NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

### 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 *via* email to your institution.

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