



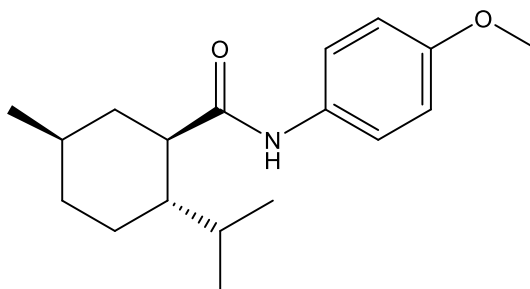
Catalog #10-5964

WS-12

CAS 68489-09-8

(1R,2S,5R)-N-(4-Methoxyphenyl)-5-methyl-2-(1-methylethyl)-cyclohexanecarboxamide

Lot # E107471



WS-12 is a TRPM8 agonist ($EC_{50} = 12 \mu M$) which is selective over TRPV1-4 and TRPA1.^{1,2} It induces analgesia in the hot plate test, an effect that can be reversed by the opioid receptor antagonist naloxone, in mice.³ Displays protective effects in indomethacin-induced small intestinal injury.⁴

- 1) Sherkheli *et al.* (2008), *Menthol derivative WS-12 selectively activates transient receptor potential melastatin-8 (TRPM8) ion channels*; Pak. J. Pharm. Sci. **21** 370
- 2) Bodding *et al.* (2007), *Characterisation of TRPM8 as a pharmacophore receptor*; Cell Calcium, **42** 618
- 3) Liu *et al.* (2013), *TRPM8 is the principal mediator of menthol-induced analgesia of acute and inflammatory pain*; Pain **154** 2169
- 4) Fouad *et al.* (2021), *Protective Effect of TRPM8 against Indomethacin-Induced Small Intestinal Injury via the Release of Calcitonin Gene-Related Peptide in Mice*; Biol. Pharm. Bull. **44** 947

PHYSICAL DATA

Molecular Weight:	289.42
Molecular Formula:	C ₁₈ H ₂₇ NO ₂
Purity:	>98% (HPLC)
	NMR: (Conforms)
Solubility:	DMSO (10 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 3 years from the date of purchase. Solutions in ethanol may be stored at -20°C for up to 3 months.

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