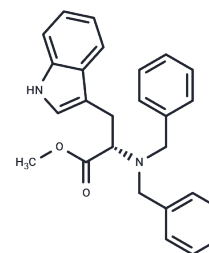


TRPM8 antagonist 2

Chemical Properties

CAS No. :	259674-19-6
Formula:	C ₂₆ H ₂₆ N ₂ O ₂
Molecular Weight:	398.5
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	TRPM8 antagonist 2 is a potent and selective TRPM8 antagonist with an IC ₅₀ of 0.2 nM, used in the research of neuropathic pain syndromes.
Targets(IC ₅₀)	TRP/TRPV Channel
In vitro	TRPM8 antagonist 2 (Compound 14) is a potent and selective TRPM8 antagonist with an IC ₅₀ of 0.2 nM, used in neuropathic pain research. It effectively inhibits menthol-induced increases in intracellular Ca ²⁺ levels in Ca ²⁺ fluorimetric assays in HEK293 cells expressing the rat TRPM8 isoform (IC ₅₀ , 40 nM).
In vivo	TRPM8 antagonist 2, administered subcutaneously at doses of 1, 10, and 30 mg/kg, demonstrates significant, dose-dependent antinociceptive effects and reduces wet-dog shakes (WDS)-like cold hypersensitivity in mice by 63% at the 30 mg/kg dosage. Additionally, at lower doses of 0.1 and 1 µg, it effectively mitigates Oxaliplatin (OXP)-induced cold allodynia in mice.

Solubility Information

Solubility	DMSO: 160 mg/mL (401.51 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (10.04 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5094 mL	12.5471 mL	25.0941 mL
5 mM	0.5019 mL	2.5094 mL	5.0188 mL
10 mM	0.2509 mL	1.2547 mL	2.5094 mL
50 mM	0.0502 mL	0.2509 mL	0.5019 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Alessia B , Nunzio I , Carmine O , et al. Identification of a Potent Tryptophan-based TRPM8 Antagonist With in vivo Analgesic Activity[J]. Journal of Medicinal Chemistry, 2018:acs.jmedchem.8b00545-.

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Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481