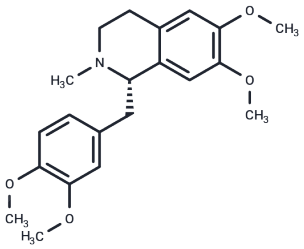
Data Sheet (Cat.No.TN7543)

TargetMol

(S)-Laudanosine

Chemical Properties



CAS No. : 2688-77-9

Formula: C21H27NO4

Molecular Weight: 357.44

Storage: Store at low temperature
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	(S)-Laudanosine is the corresponding isomer of Laudanosine, which crosses the blood-brain barrier, causing euphoria and seizures, with potential systemic toxicity and analgesic effects. In the cardiovascular system, high plasma concentrations can lead to hypotension and bradycardia.Laudanosine interacts with γ-aminobutyric acid, opioid, and nicotinic acetylcholine receptors, and inhibits the low-affinity GABA receptor, as well as competitively binds to the opioid receptor Mu-1 receptor.
Targets(IC50)	Others,Opioid Receptor,GABA Receptor

Solubility Information

Solubility	DMSO: 40 mg/mL (111.91 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: 1 mg/mL (2.8 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7977 mL	13.9884 mL	27.9767 mL
5 mM	0.5595 mL	2.7977 mL	5.5953 mL
10 mM	0.2798 mL	1.3988 mL	2.7977 mL
50 mM	0.056 mL	0.2798 mL	0.5595 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

Fodale V, et al. Laudanosine, an atracurium and cisatracurium metabolite[J]. European journal of anaesthesiology, 2002, 19(7): 466-473.
Katz Y, et al. Interactions between laudanosine, GABA, and opioid subtype receptors: implication for laudanosine seizure activity. Brain Res. 1994 May 23;646(2):235-41.
Chuliá S, et al. Mechanism of the cardiovascular activity of laudanosine: comparison with papaverine and other benzylisoquinolines. Br J Pharmacol. 1994 Dec;113(4):1377-85.
Chapple DJ, et al. Cardiovascular and neurological effects of laudanosine. Studies in mice and rats, and in conscious and anaesthetized dogs. Br J Anaesth. 1987 Feb;59(2):218-25.