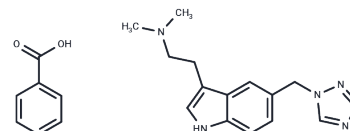


Rizatriptan benzoate

Chemical Properties

CAS No. : 145202-66-0
Formula: C₂₂H₂₅N₅O₂
Molecular Weight: 391.47
Appearance: no data available
Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	Rizatriptan benzoate (MK-462 Benzoate) selectively binds to and activates serotonin (5-HT) 1B receptors and 5-HT 1D receptors providing relief of migraine headaches.
Targets(IC ₅₀)	5-HT Receptor
In vivo	Rizatriptan blocks neurogenic vasodilation via an action on 5-HT(1D) receptors located on perivascular trigeminal nerves to inhibit CGRP release in anaesthetized guinea-pigs. Rizatriptan evokes a transient reduction in dural blood vessel diameter which recovered to baseline values within 10?min in anaesthetized guinea-pigs. [1] Rizatriptan significantly inhibits dural plasma protein extravasation produced by high intensity electrical stimulation of the trigeminal ganglion. Rizatriptan significantly reduces electrically stimulated dural vasodilation in anaesthetised rats. [2] Rizatriptan Benzoate significantly reduced SP mRNA levels in the midbrains of normal and model group rats, indicating that Rizatriptan Benzoate can downregulate SP gene expression in the rat midbrain. Rizatriptan Benzoate significantly reduces midbrain PENK mRNA expression, decreasing the levels of midbrain met-enkephalin and leu-enkephalin, and thereby weakening the analgesic effects of the endogenous pain modulatory system in rat model of migraine. [3] Rizatriptan Benzoate leads to the number of Fos-like immunoreactive neurons decreased in the spinal trigeminal nucleus caudal part and raphe magnus nucleus, increased the number of Fos-like immunoreactive neurons in the periaqueductal gray and remained unchanged in the ventromedial hypothalamic nucleus and mediodorsal thalamus nucleus in conscious rats. [4] Rizatriptan Benzoate markedly reduces the number of head-flicks in the rats. Rizatriptan Benzoate also significantly reduces the duration of grooming behavior by nearly 2-fold when compared with that without treatment. [5]

Solubility Information

Solubility	DMSO: 16.67 mg/mL (42.57 mM), Sonication is recommended. H ₂ O: 39.2 mg/mL (100 mM), (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

A DRUG SCREENING EXPERT

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5545 mL	12.7724 mL	25.5447 mL
5 mM	0.5109 mL	2.5545 mL	5.1089 mL
10 mM	0.2554 mL	1.2772 mL	2.5545 mL
50 mM	0.0511 mL	0.2554 mL	0.5109 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.

Reference

Williamson DJ, et al. Br J Pharmacol, 2001, 133(7), 1029-1034.

Williamson DJ, et al. Eur J Pharmacol, 1997, 328(1), 61-64.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286

E_mail: info@targetmol.com

Address: 36 Washington Street, Wellesley Hills, MA 02481