

JYL 1421

Chemical Properties

CAS No. : 401907-26-4

Formula: C₂₀H₂₆FN₃O₂S₂

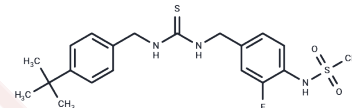
Molecular Weight: 423.57

Keep away from direct sunlight, Store at low temperature

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	JYL 1421 (SC 0030) is an antagonist of TRPV1 receptor (IC ₅₀ = 8 nM).
Targets(IC ₅₀)	TRP/TRPV Channel
In vitro	JYL 1421(5 min) inhibits the capsaicin (330 nM)-evoked Ca ²⁺ accumulation in a concentration-dependent manner. The inhibitory effect of the lowest concentration (5 nM) of JYL 1421 reaches the level of significance and 1 μM almost abolishes the response, only 3.1±0.65% of the first capsaicin-induced Ca ²⁺ influx could be observed [1].
In vivo	Intravenous capsaicin injection at 1 and 2 μg/kg causes a temporary blood pressure drop of 47.4±4.7 and 59.6±4.2 mmHg (n=6), respectively. JYL 1421 at 0.4 and 1.6 mg/kg does not induce hypotension but inhibits the capsaicin-induced blood pressure drop in a dose-dependent manner, necessitating higher capsaicin doses to trigger reflex hypotension post-administration. Capsazepine up to 2 mg/kg does not significantly inhibit capsaicin-evoked hypotension. Capsaicin solution (50 μL, 10 μg/mL) instilled into the left eye of rats causes 12.9±1.3 wiping movements within 3 minutes. Pretreatment with JYL 1421 (0.4 or 1 mg/kg i.p.) does not significantly affect wiping behavior, but doses of 2-5 mg/kg reduce the movements dose-dependently with an ID ₅₀ value of 4.6 mg/kg. The mean arterial pressure of untreated rats is 109.9±4.2 mmHg (n=6)[1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3609 mL	11.8044 mL	23.6088 mL
5 mM	0.4722 mL	2.3609 mL	4.7218 mL
10 mM	0.2361 mL	1.1804 mL	2.3609 mL
50 mM	0.0472 mL	0.2361 mL	0.4722 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

Jakab B, et al. Pharmacological characterization of the TRPV1 receptor antagonist JYL1421 (SC0030) in vitro and in vivo in the rat. *Eur J Pharmacol.* 2005 Jul 4;517(1-2):35-44.

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:34 Washington Street,Wellesley Hills,MA 02481