Taprenepag isopropyl

Cat. No.: HY-19998

CAS No.: 1005549-94-9

Molecular Formula: $C_{27}H_{28}N_4O_5S$

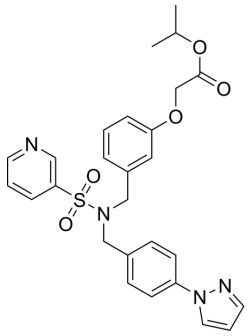
Molecular Weight: 520.6

Target: Prostaglandin Receptor

Pathway: GPCR/G Protein

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 200 mg/mL (384.17 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.9209 mL	9.6043 mL	19.2086 mL
	5 mM	0.3842 mL	1.9209 mL	3.8417 mL
	10 mM	0.1921 mL	0.9604 mL	1.9209 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: 5 mg/mL (9.60 mM); Suspended solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 5 mg/mL (9.60 mM); Suspended solution; Need ultrasonic
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 5 mg/mL (9.60 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Taprenepag isopropyl is a highly selective EP_2 receptor agonist.

IC_{50} & Target

EP2

In Vivo

Taprenepag isopropyl is a highly selective EP_2 receptor agonist. Intraocular pressure (IOP) in the left, vehicle-dosed eye typically remains within the normal range. In the right (Taprenepag isopropyl-dosed) eye, IOP is reduced in all dose groups. In the high-dose group, IOP is reduced to the extent that it cannot be measured (<4mm Hg) on Days 22 and 29. There are no

clinical signs or changes in body weight observed with any dose of Taprenepag isopropyl administration, and noocular findings occur for animals in the low-dose group (0.75 mg/day)[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

PROTOCOL

Animal Administration [1]

Three year-old, male cynomolgus monkeys with body weights ranging from 2.6 to 5.0 kg are used in this study. Animals are dosed twice daily for 28 days in the right eye with Taprenepag isopropyl (0.75, 12, or 36 mg/day), and an equal volume of vehicle (containing cremophor, boric acid, BAC, and EDTA) is dosed in the left eye. An additional 2 monkeys are included in the high-dose group to assess recovery over a 28 day period. Toxicity outcomes are based on the assessment of clinical signs, body weight, ophthalmic examination, pupillary diameter, corneal staining, pachymetry, and noncontact specular microscopy. IOP is measured once during the predose phase and before dosing on Days 1, 8, 15, 22, and 29 of the dosing phase, then once during each week of the recovery period[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Cells. 2019 Dec 8;8(12):1596.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Yanochko GM, et al. Investigation of ocular events associated with taprenepag isopropyl, a topical EP2 agonist in development for treatment of glaucoma. J Ocul Pharmacol Ther. 2014 Jun;30(5):429-39.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA