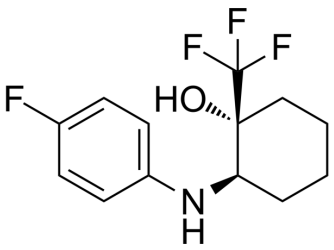
BAY-390

Cat. No.:	HY-148236
CAS No.:	2741956-55-6
Molecular Formula:	$C_{13}H_{15}F_4NO$
Molecular Weight:	277.26
Target:	TRP Channel
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Storage:	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (360.67 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.6067 mL	18.0336 mL	36.0672 mL
	5 mM	0.7213 mL	3.6067 mL	7.2134 mL
	10 mM	0.3607 mL	1.8034 mL	3.6067 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: ≥ 2.5 mg/mL (9.02 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (9.02 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

BAY-390 is a selective, across species active and brain penetrating TRPA1 inhibitor. BAY-390 inhibits hTRPA1 FLIPR, hTRPA1 Ephys, rTRPA1 FLIPR and rDRG Ephys with IC_{50}s of 16, 82, 63 and 35 nM, respectively. BAY-390 can be used for the research of inflammation[1].

IC_{50} & Target

IC50: 16 nM (hTRPA1 FLIPR), 82 nM (hTRPA1 Ephys), 63 nM (rTRPA1 FLIPR), 35 nM (rDRG Ephys), 73 nM (mTRPA1), 68 nM (gpTRPA1), 81 nM (dogTRPA1)m, 19 nM (monkeyTRPA1)[1]

In Vitro

BAY-390 inhibits hTRPA1 FLIPR, hTRPA1 Ephys, rTRPA1 FLIPR and rDRG Ephys with IC_{50}s of 16, 82, 63 and 35 nM, respectively [1].

BAY-390 inhibits mTRPA1, gpTRPA1, dogTRPA1 and monkeyTRPA1 with IC_{50}s of 73, 68, 81 and 19 nM, respectively[1].

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

In Vivo

BAY-390 (30 and 90 mg/kg; p.o.; BID for 10 days) effects the neuropathic pain in vivo[1].
BAY-390 reduces visceral pain in rat cyclophosphamide induced cystitis models[1].
BAY-390 shows efficacy in inflammatory pain and neurogenic inflammation models[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Nrodent animals with neuropathic pain[1]
Dosage:	30 and 90 mg/kg
Administration:	Oral gavage; 30 and 90 mg/kg; twice daily for 10 days
Result:	Effectively reduced the neuropathic pain in rodent neuropathic pain model.

REFERENCES

[1]. null

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