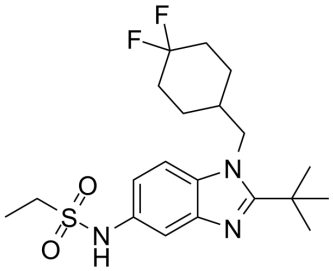
AZD1940

Cat. No.:	HY-119104
CAS No.:	881413-29-2
Molecular Formula:	$C_{20}H_{29}F_2N_3O_2S$
Molecular Weight:	413.52
Target:	Cannabinoid Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
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 : 100 mg/mL (241.83 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.4183 mL	12.0913 mL	24.1826 mL
	5 mM	0.4837 mL	2.4183 mL	4.8365 mL
	10 mM	0.2418 mL	1.2091 mL	2.4183 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 (6.05 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (6.05 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

AZD1940 is an orally active, high affinity cannabinoid CB1/CB2 receptor agonist with pK_i values of 7.93 and 9.06 for human CB1R and CB2R, respectively. AZD1940 shows a robust analgesia action[1][2].

IC_{50} & Target

hCB1-R	hCB2-R
7.93 (pKi)	9.06 (pKi)

In Vitro

AZD1940 binds with high affinity to human, rat and mouse CB1 and CB2 receptors and displays full agonism at both receptors in all three species[1][2].

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

In Vivo	When given orally to rats, AZD1940 produces a robust analgesia in different models of inflammatory and neuropathic pain[1] [2]. For AZD1940, low brain uptake at analgesic doses has been demonstrated in both rats and primates[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Jarkko Kalliomäki, et al. Evaluation of the analgesic efficacy and psychoactive effects of AZD1940, a novel peripherally acting cannabinoid agonist, in human capsaicin-induced pain and hyperalgesia. Clin Exp Pharmacol Physiol. 2013 Mar;40(3):212-8.

[2]. Magnus Schou, et al. Radiolabeling of the cannabinoid receptor agonist AZD1940 with carbon-11 and PET microdosing in non-human primate. Nucl Med Biol. 2013 Apr;40(3):410-4.

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