CB2 receptor agonist 2

Cat. No.: HY-132217

CAS No.: 1314230-75-5

Molecular Formula: $C_{30}H_{36}N_2O_4$

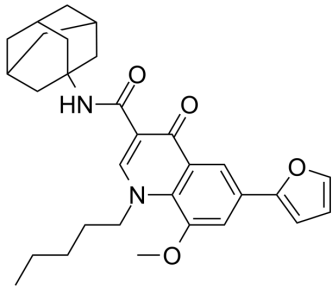
Molecular Weight: 488.62

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

Ethanol : 30 mg/mL (61.40 mM; Need ultrasonic and warming)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.0466 mL	10.2329 mL	20.4658 mL
5 mM	0.4093 mL	2.0466 mL	4.0932 mL
10 mM	0.2047 mL	1.0233 mL	2.0466 mL

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

BIOLOGICAL ACTIVITY

Description

CB2 receptor agonist 2 is a potent and selective agonist for the CB2 (cannabinoid type 2) receptor with a K_i of 8.5 nM. CB2 receptor agonist 2 has high affinity and selectivity for CB2[1].

IC_{50} & Target

CB2
8.5 nM (Ki)

In Vitro

CB2 receptor agonist 2 (compound 4g) (1 μM; 72 hours) has very low or no cytotoxicity to Hep-G2 cells[1].

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

Cell Proliferation Assay[1]

Cell Line:	Hep-G2 (Human hepatoblastoma) cells
Concentration:	1 μM
Incubation Time:	72 hours

Result:	Exhibited very low or no cytotoxicity to Hep-G2 cells.

In Vivo

CB2 receptor agonist 2 (compound 4g) (1 and 3 mg/kg; 1 hour) is very potent (with maximal effect being reached already at the 1 mg/kg dose) and has antihyperalgesic effects, efficacious also on the first phase of the nocifensive response and strongly reduced by AM630 (CB2-selective antagonist/inverse agonist) [1].

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

Animal Model:	Formalin injection induces a biphasic stereotypical nocifensive behavior in mice[1]
Dosage:	Formalin (1.25% in saline, 30 μL), 1 and 3 mg/kg CB2 receptor agonist 2, 1 mg/kg AM630, monitor every 5 minutes for 1 hour
Administration:	Injection in the dorsal surface of one side of the hindpaw (Formalin), i.p. (CB2 receptor agonist, AM630)
Result:	Elicited antihyperalgesic effects and potent (with maximal effect being reached already at the 1 mg/kg dose) and efficacious, strongly reduced by AM630.

REFERENCES

[1]. Pasquini S, et al. Investigations on the 4-quinolone-3-carboxylic acid motif. 4. Identification of new potent and selective ligands for the cannabinoid type 2 receptor with diverse substitution patterns and antihyperalgesic effects in mice. J Med Chem. 20

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