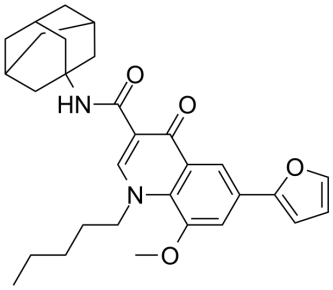
CB2 receptor agonist 2

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:	Please store the product under the recommended conditions in the Certificate of Analysis.



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. 2011;54(15):5444-5453.

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