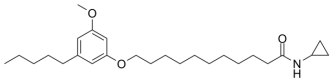
CB1/2 agonist 2

Cat. No.:	HY-150028
CAS No.:	2772379-97-0
Molecular Formula:	$C_{26}H_{43}NO_3$
Molecular Weight:	417.62
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

CB1/2 agonist 2 (compound 23) is a potent non-selective cannabinoid ligand, with K_i values of 3.5 and 1.2 nM, respectively. CB1/2 agonist 2 can behave as a full CB1 agonist and CB2 competitive inverse agonist. CB1/2 agonist 2 shows antinociceptive activity[1].

IC_{50} & Target

hCB2-R	hCB1-R
1.2 nM (Ki)	3.5 nM (Ki)

In Vitro

CB1/2 agonist 2 (compound 23) (1 μM, 24-72 h) exhibits a very low cytotoxic potential in Hep-G2 cells[1].
CB1/2 agonist 2 (0-10 μM) shows a slight but significant inhibition of [35S]GTPγS binding to hCB2-CHO cell membranes, with a mean EC_{50} of 397.90 nM and a mean E_{max} value of -17.81%[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Cytotoxicity Assay[1]

Cell Line:	Human hepatoblastoma (Hep-G2) cells
Concentration:	1 μM
Incubation Time:	24, 48 or 72 h
Result:	Exhibited a very low cytotoxic potential, as Hep-G2 cell viability was comparable to controls after 24-72 h of treatment.

In Vivo

CB1/2 agonist 2 (compound 23) (0-6 mg/kg, IP, once) significantly reduces the late phase of formalin-induced nocifensive behaviour at 6 mg/kg[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male CD-1 outbred mice (40-45 g)[1]
Dosage:	0, 1, 3, and 6 mg/kg
Administration:	IP, once, 10 min before the formalin or saline injection
Result:	Significantly reduced the late phase of formalin-induced nocifensive behaviour at the

	highest dose (6 mg/kg, i.p.), whereas no effect was produced by doses of 1 and 3 mg/kg.

REFERENCES

[1]. Brizzi A, et al. Synthetic bioactive olivetol-related amides: The influence of the phenolic group in cannabinoid receptor activity. Bioorg Med Chem. 2020 Jun 1;28(11):115513.

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