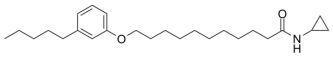
CB1/2 agonist 3

Cat. No.:	HY-150029
CAS No.:	2772655-86-2
Molecular Formula:	$C_{25}H_{41}NO_2$
Molecular Weight:	387.6
Target:	Cannabinoid Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Powder -20°C 3 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 10 mg/mL (25.80 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.5800 mL	12.8999 mL	25.7998 mL
	5 mM	0.5160 mL	2.5800 mL	5.1600 mL
	10 mM	0.2580 mL	1.2900 mL	2.5800 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: 1 mg/mL (2.58 mM); Suspended solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 1 mg/mL (2.58 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

CB1/2 agonist 3 (compound 52), a potent non-selective cannabinoid ligand, is a CB1/CB2 (cannabinoid receptor) competitive agonist. CB1/2 agonist 3 acts on hCB1 and hCB2 with K_i values of 5.9 nM and 3.5 nM, respectively[1].

IC_{50} & Target

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

In Vitro

CB1/2 agonist 3 (compound 52) can partially induce [^{35}S]GTPγS binding to hCB1-CHO cell membranes with an EC_{50} value of 30.99 nM, and slightly inhibit [^{35}S]GTPγS binding to hCB2-CHO cell membranes with a mean EC_{50} value of 1.28 nM[1].
CB1/2 agonist 3 (compound 52) ((1 μM, 1 h) has antagonistic effect on CB1/CB2 agonist CP-55940 with a K_b value of 78.17 nM [1].

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

REFERENCES

[1]. Antonella Brizzi, 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.

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