CB2R antagonist 3

Cat. No.: HY-152581

Molecular Formula: $C_{27}H_{42}N_2O$

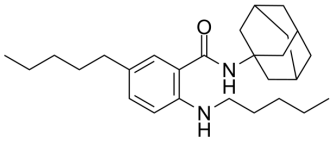
Molecular Weight: 410.64

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 (243.52 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.4352 mL	12.1761 mL	24.3522 mL
5 mM	0.4870 mL	2.4352 mL	4.8704 mL
10 mM	0.2435 mL	1.2176 mL	2.4352 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: 2.5 mg/mL (6.09 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

CB2R antagonist 3 is a selective antagonist of cannabinoid type 2 receptor (CB2R). CB2R antagonist 3 has high affinity for human CB2R and specific selectivity for CB1R. CB2R antagonist 3 can be combined with CB65 (HY-110047), the activator of CB2R. CB2R antagonist 3 effectively up-regulates the expression of anti-inflammatory cytokines and down-regulates the expression of pro-inflammatory cytokines[1].

IC_{50} & Target

CB2R

In Vitro

CB2R antagonist 3 (compound 10a) (1 and 10 μM; 24 h) significantly reduces the TNF-α, IFN-γ, IL-1β, IL-6 pro-inflammatory cytokines expression and increases the IL-10 anti-inflammatory cytokines expression in monocytes and macrophages when combined with activator CB65 under the presence of lipopolysaccharide[1].

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

REFERENCES

[1]. Graziano G, et al. N-adamantyl-anthranil amide derivatives: New selective ligands for the cannabinoid receptor subtype 2 (CB2R). Eur J Med Chem. 2023 Feb 15;248:115109.

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