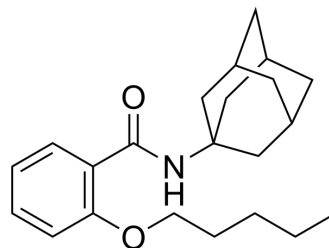


CB2R/FAAH modulator-3

Cat. No.:	HY-152254		
CAS No.:	2876918-67-9		
Molecular Formula:	C ₂₂ H ₃₁ NO ₂		
Molecular Weight:	341.49		
Target:	FAAH; Cannabinoid Receptor		
Pathway:	Metabolic Enzyme/Protease; Neuronal Signaling; GPCR/G Protein		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 50 mg/mL (146.42 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	2.9283 mL	14.6417 mL	29.2834 mL
		5 mM	0.5857 mL	2.9283 mL	5.8567 mL
		10 mM	0.2928 mL	1.4642 mL	2.9283 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: 2.5 mg/mL (7.32 mM); Suspended solution; Need ultrasonic				
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (7.32 mM); Clear solution				
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (7.32 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	CB2R/FAAH modulator-3 (compound 27) is a dual targeting modulator that acts as a CB2R agonist and FAAH inhibitor. The K _i values for CB2R/FAAH modulator-3 are 20.1 and 67.6 nM for CB2R and CB1R, respectively, and the IC ₅₀ value for FAAH is 3.4 μM. CB2R/FAAH modulator-3 can be used in studies related to cancer, deleterious inflammatory cascades occurring in neurodegenerative diseases, and COVID-19 infection ^[1] .	
IC ₅₀ & Target	CB1 67.6 nM (K _i)	CB2 20.1 nM (K _i)

In Vitro

CB2R/FAAH modulator-3 (compound 27)(10 μ M) reduces the production of the pro-inflammatory cytokines TNF α , IFN- γ , IL-1 β and IL6 in unstimulated monocytes and macrophages^[1].

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

REFERENCES

[1]. Francesca Intranuovo, et al. Development of N-(1-Adamantyl)benzamides as Novel Anti-Inflammatory Multitarget Agents Acting as Dual Modulators of the Cannabinoid CB2 Receptor and Fatty Acid Amide Hydrolase. J Med Chem. 2023 Jan 12;66(1):235-250.

Caution: Product has not been fully validated for medical applications. For research use only.

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