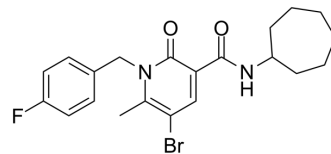


CB1/2 agonist 1

Cat. No.:	HY-147512
Molecular Formula:	C ₂₁ H ₂₄ BrFN ₂ O ₂
Molecular Weight:	435.33
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 1 is a potent and cross the blood-brain barrier CB1/2 agonist with EC ₅₀ s of 56.15, 11.63 nM for CB1R and CB2R, respectively. CB1/2 agonist 1 reduces glutamate release and LPS-induced activation of microglial cells. CB1/2 agonist 1 shows anti-inflammatory and antinociceptive effects. CB1/2 agonist 1 has the potential for the research of multiple sclerosis [1].	
IC₅₀ & Target	hCB1-R 56.15 nM (EC50)	cannabinoid type-2 receptors 11.63 nM (EC50)
In Vitro	<p>CB1/2 agonist 1 (compound B2) (10 μM) inhibits AEA hydrolysis with an IC₅₀ of 5.9 μM for FAAH^[1].</p> <p>CB1/2 agonist 1 shows high affinity for CB1R and CB2R with K_is of 2.9, 1.5 nM, respectively^[1].</p> <p>CB1/2 agonist 1 (10 μM) shows anti-inflammatory effect and significantly decreases the secretion of IL-1β and IL-6, increases the release of anti-inflammatory IL-10 to 483.7% in LPS-activated BV-2 cells^[1].</p> <p>CB1/2 agonist 1 (1, 10 μM) inhibits 4-AP-evoked glutamate release^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>	
In Vivo	<p>CB1/2 agonist 1 (5-50 mg/kg) dose-dependently relieves neuropathic pain in a mouse model of oxaliplatin-induced neuropathic pain^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>	

REFERENCES

[1]. Arena C, et al. The endocannabinoid system dual-target ligand N-cycloheptyl-1,2-dihydro-5-bromo-1-(4-fluorobenzyl)-6-methyl-2-oxo-pyridine-3-carboxamide improves disease severity in a mouse model of multiple sclerosis. *Eur J Med Chem.* 2020 Dec 15;208:112858.

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

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