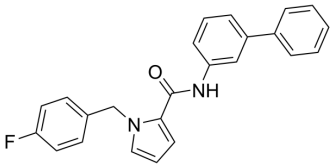
CB2 receptor agonist 6

Cat. No.:	HY-163394
Molecular Formula:	$C_{24}H_{19}FN_2O$
Molecular Weight:	370.42
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	CB2 receptor agonist 6 (compound 70) is an agonist of CB2R, with EC_{50} of 162 nM. The IC_{50} values of CB2 receptor agonist 6 are 4.83 μM for CB1R and 0.88 μM for CB2R. CB2 receptor agonist 6 is a neuroprotective agent that can be used for the reseach of neurological disease[1].
IC_{50} & Target	CB2R
In Vitro	CB2 receptor agonist 6 (compound 70) (5 μM, 0/15/30/60 min) shows good metabolic stability in vitro [1]. CB2 receptor agonist 6 (5 μM, 0/0.5/1/1.5/2 h) can activate CB2R in vitro and inhibit cAMP expression in mice and humans[1]. CB2 receptor agonist 6 (0.01-10 μM, 90 min) shows selectivity to CB2R , with the values of Ki are 8.8 nM for CB1R and 0.89 nM for CB2R[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	CB2 receptor agonist 6 (compound 70) (1 mg/kg, intraperitoneal injection, predetermined intervals 0.25/0.5/1/2/6/24 h) can significantly reverse the forgetting effect of scopolamine-induced amnesia murine model, and does not affect the spatial learning and memory ability of naive mice[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Scopolamine-induced amnesia murine model[1]
Dosage:	0.1 mg/kg, 1 mg/kg, 5 mg/kg, 10 mg/kg
Administration:	Subcutaneous injection (s.c.)
Result:	Showed neuroprotective effects on scopolamine induced cognitive function in male mice. Did not affect spatial learning and memory processes in naïve mice.

REFERENCES

[1]. Di Micco S, et al. Novel pyrrole based CB2 agonists: New insights on CB2 receptor role in regulating neurotransmitters' tone. Eur J Med Chem. 2024 Mar 11;269:116298.

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

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