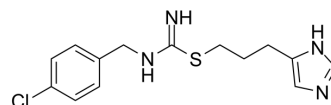


Clobenpropit

Cat. No.:	HY-115447
CAS No.:	145231-45-4
Molecular Formula:	C ₁₄ H ₁₇ ClN ₄ S
Molecular Weight:	308.83
Target:	Histamine Receptor
Pathway:	GPCR/G Protein; Immunology/Inflammation; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Clobenpropit is a potent histamine H ₃ -receptor antagonist. Clobenpropit decreases dopamine release and increases histamine levels in the hypothalamus. Clobenpropit shows antipsychotic-like activities. Clobenpropit causes a resuscitating effect in rats subjected to the hemorrhagic shock ^{[1][2]} .																
IC₅₀ & Target	H ₃ receptor																
In Vivo	<p>Clobenpropit (15 mg/kg; i.p.; once daily for 7 days) counteracts the modulatory effects of MK-801 (HY-15084B) on dopamine and histamine levels and prevents MK-801-induced hyper locomotor behaviors^[1].</p> <p>Clobenpropit (1, 2, 5 μmol/kg; i.v.) causes a resuscitating effect in rats subjected to the hemorrhagic shock^[2].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>150-200g, 12-week-old male wistar albino rats^[1]</td> </tr> <tr> <td>Dosage:</td> <td>15 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>i.p.; once daily for 7 days</td> </tr> <tr> <td>Result:</td> <td>Exhibited a significant reduction of hyperlocomotor activities induced by a single-dose administration of MK-801 (0.2 mg/kg, i.p.), and reduced the MK-801-induced dopamine release, exhibited further increase in histamine levels in the hypothalamus.</td> </tr> </table> <table border="1"> <tr> <td>Animal Model:</td> <td>205-470g, adult male Wistar rats^[2]</td> </tr> <tr> <td>Dosage:</td> <td>1, 2, 5 μmol/kg (after 6-hydroxydopamine (50 mg/kg (SC) for 3 consecutive days)</td> </tr> <tr> <td>Administration:</td> <td>i.v.</td> </tr> <tr> <td>Result:</td> <td>Triggered a statistically significant increase of mean arterial pressure (MAP) (dose 2 μmol/kg) and heart rate (HR) (doses of 1, 2, 5 μmol/kg).</td> </tr> </table>	Animal Model:	150-200g, 12-week-old male wistar albino rats ^[1]	Dosage:	15 mg/kg	Administration:	i.p.; once daily for 7 days	Result:	Exhibited a significant reduction of hyperlocomotor activities induced by a single-dose administration of MK-801 (0.2 mg/kg, i.p.), and reduced the MK-801-induced dopamine release, exhibited further increase in histamine levels in the hypothalamus.	Animal Model:	205-470g, adult male Wistar rats ^[2]	Dosage:	1, 2, 5 μmol/kg (after 6-hydroxydopamine (50 mg/kg (SC) for 3 consecutive days)	Administration:	i.v.	Result:	Triggered a statistically significant increase of mean arterial pressure (MAP) (dose 2 μmol/kg) and heart rate (HR) (doses of 1, 2, 5 μmol/kg).
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REFERENCES

[1]. Mahmood D, et al. The Effect of Subchronic Dosing of Ciproxifan and Clobenpropit on Dopamine and Histamine Levels in Rats. J Exp Neurosci. 2015 Aug 31;9:73-80.

[2]. Wanot B, et al. Cardiovascular effects of H3 histamine receptor inverse agonist/ H4 histamine receptor agonist, clobenpropit, in hemorrhage-shocked rats. PLoS One. 2018 Aug 2;13(8):e0201519.

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

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