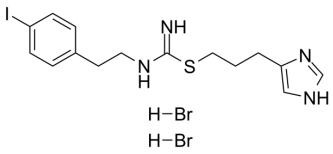
Iodophenpropit dihydrobromide

Cat. No.:	HY-107568
CAS No.:	145196-87-8
Molecular Formula:	$C_{15}H_{21}Br_2IN_4S$
Molecular Weight:	576.13
Target:	Histamine Receptor
Pathway:	GPCR/G Protein; Immunology/Inflammation; Neuronal Signaling
Storage:	-20°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 57.6 mg/mL (99.98 mM; Need ultrasonic and warming)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	1.7357 mL	8.6786 mL	17.3572 mL
	5 mM	0.3471 mL	1.7357 mL	3.4714 mL
	10 mM	0.1736 mL	0.8679 mL	1.7357 mL

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

BIOLOGICAL ACTIVITY

Description

Iodophenpropit dihydrobromide is a potent and selective histamine H3 receptor antagonist. The binding of [^{125}I]Iodophenpropit is selective, saturable, readily reversible, and of high affinity (K_D 0.32 nM)[1].

IC_{50} & Target

H_3 Receptor
0.32 nM (Kd)

In Vitro

Iodophenpropit is a very potent H3 receptor antagonist and shows only a moderate affinity for the H1 and H2 receptor[2]. Iodophenpropit inhibit 5-hydroxytryptamine (5-HT) responses with an IC_{50} of 1.57±0.3 μM[3].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Iodophenpropit (1 μg/kg; through intramuscular; b.i.d.; for 10 days) shows significant enhancement of total anti- sheep red blood cells (SRBC)- immunoglobulins (Igs) in rabbits[4].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	New Zealand adult healthy rabbits of either sex weighing 1.63±0.36 kg[4]

Dosage:	1 μg/kg
Administration:	Administered through intramuscular (i.m.); b.i.d.; for 10 days
Result:	Could influence a detectable antibody response to SRBC.

REFERENCES

[1]. Jansen FP, et al. The first radiolabeled histamine H3 receptor antagonist, [^{125}I]Iodophenpropit: saturable and reversible binding to rat cortex membranes. Eur J Pharmacol. 1992 Jul 7;217(2-3):203-5.

[2]. Leurs R, et al. Evaluation of the receptor selectivity of the H3 receptor antagonists, Iodophenpropit and thioperamide: an interaction with the 5-HT3 receptor revealed. Br J Pharmacol. 1995 Oct;116(4):2315-21.

[3]. Allen MC. Agonist and antagonist effects of histamine H3 receptor ligands on 5-HT3 receptor-mediated ion currents in NG108-15 cells. Eur J Pharmacol. 1998 Nov 20;361(2-3):261-8.

[4]. Trivendra Tripathi, et al. In vivo immunomodulatory profile of histamine receptors (H1, H2, H3 and H4): a comparative antagonists study. Asian Pac J Trop Med. 2010 Jun;3(6):465-470.

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