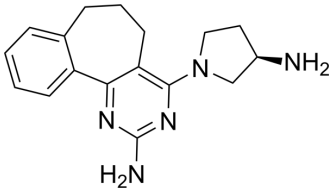
A-943931

Cat. No.:	HY-113936
CAS No.:	1027330-97-7
Molecular Formula:	$C_{17}H_{21}N_5$
Molecular Weight:	295.38
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	A-943931 is a potent and selective histamine H4 receptor (H4R) antagonist with pK_i values of 4.6, 3.8 nM for human and rat H4R, respectively. A-943931 shows anti-inflammatory and antinociceptive efficacy[1][2].

IC_{50} & Target	Human H_4 Receptor 4.6 nM (Ki)	Rat H_4 receptor 3.8 nM (Ki)

In Vivo

A-943931 shows anti-inflammatory activity in zymosan-induced peritonitis in mice with the ED_{50}s of 34, 33 μmol/kg for s.c. and i.p., respectively[2].

A-943931 (10, 30, 100 μmol/kg; i.p.) shows antinociceptive efficacy in inflammatory pain and neuropathic pain model in rats [2].

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

Animal Model:	Rats (carrageenan-induced inflammatory pain and spinal nerve ligation model of neuropathic pain)[2]
Dosage:	10, 30, 100 μmol/kg
Administration:	I.p.
Result:	Showed antinociceptive efficacy in an inflammatory pain model in rat at an ED_{50} value of 72 μmol/kg, ip, and in a neuropathic pain model at an ED_{50} value of 100 μmol/kg, ip.

REFERENCES

[1]. Ivan Milicic, et al. Identification of two potent and selective histamine H4 receptor antagonists with antipruritic activity. The FASEB journal homepage. 2009.

[2]. Cowart MD, et al. Rotationally constrained 2,4-diamino-5,6-disubstituted pyrimidines: a new class of histamine H4 receptor antagonists with improved druglikeness and in vivo efficacy in pain and inflammation models. J Med Chem. 2008 Oct 23;51(20):6547-57.

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