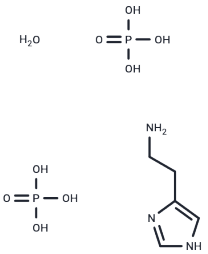
Data Sheet (Cat.No.T6535)

TargetMol

Histamine Phosphate

Chemical Properties



CAS No. : 51-74-1

Formula: C5H9N·2H3O4P

Molecular Weight: 307.14

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Histamine Phosphate (Histamine acid phosphate) acts directly on the blood vessels to dilate arteries and capillaries mediated by both H 1- and H 2-receptors.
Targets(IC50)	Histamine Receptor
In vitro	Histamine (10 μM) gives a larger inositol monophosphate accumulation in bovine adrenal chromaffin cells. Histamine (10 μM) stimulates the level of radioactivity into the InsP3-containing fraction in bovine adrenal chromaffin cells. Histamine (100 μM) stimulates incorporation into the InsP3-containing eluate in a less extent than for angiotensin I1 and bradykinin. [1]
In vivo	Histamine phosphate (0.025 mg/kg) produces a mean increase in basilar blood flow of 145% of control in dogs. Histamine phosphate produces considerable increases in basilar blood flow as well as a decrease in femoral arterial blood pressure in dogs when injected intravenously and measured with an electromagnetic flow transducer. [2] Histamine phosphate (4 μg/kg) causes lymph flow to increase from 6.0 to 27.0 (SEM) ml/h in unanesthetized sheep. Histamine phosphate (4 μg/kg) also causes increases in lung water, pulmonary vascular resistance, arterial PCO2, pH, and hematocrit, and decreases in cardiac output and arterial PO2 in unanesthetized sheep. [3] Histamine phosphate (8.3 mg/kg/min) causes no significant change in pulmonary lymph flow (QL) or protein concentration (CL) in anesthetized open-chested dogs, however, both are increased after alloxan. Histamine phosphate (8.3 mg/kg/min) also causes no significant change in the pulmonary capillary membrane filtration coefficient (Kf) and the maximum capillary pressure (PCcritical) in anesthetized open-chested dogs. [4] Histamine phosphate (50 mg/kg) produces a pronounced rise in acid secretion but the output of pepsin remained unchanged in the unanaesthetized intact rat. Histamine phosphate (50 mg/kg) produces maximal stimulation of gastric acid secretion and is free from toxic effects in the unanaesthetized intact rat. [5]

Solubility Information

Solubility	H2O: 10 mM,Sonication is recommended. DMSO: Insoluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2558 mL	16.2792 mL	32.5584 mL
5 mM	0.6512 mL	3.2558 mL	6.5117 mL
10 mM	0.3256 mL	1.6279 mL	3.2558 mL
50 mM	0.0651 mL	0.3256 mL	0.6512 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Plevin R, et al. J Neurochem, 1988, 51(2), 634-641.
Anderson WD, et al. Stroke, 1971, 2(4), 409-415.
Brigham KL, et al. J Clin Invest, 1976, 58(2), 391-398.
Drake RE, et al. Am J Physiol, 1980, 239(1), H96-100.
VALBERG LS, et al. Gut, 1961, 2, 32-36.

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