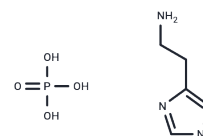
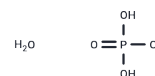


## Histamine Phosphate

### Chemical Properties

CAS No. :	51-74-1
Formula:	C <sub>5</sub> H <sub>9</sub> N·2H <sub>3</sub> O <sub>4</sub> P
Molecular Weight:	307.14
Storage:	Keep away from moisture Powder: -20°C for 3 years   In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



### Biological Description

Description	Histamine phosphate is a potent agonist of histamine receptors and a vasodilatory neurotransmitter. It can activate nitric oxide synthase and is commonly used to induce gastric ulcer models.
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 PCO <sub>2</sub> , pH, and hematocrit, and decreases in cardiac output and arterial PO <sub>2</sub> 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	H <sub>2</sub> O: 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### 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.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481