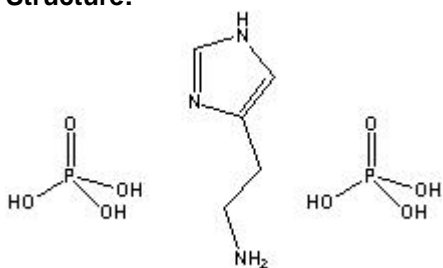


## TECHNICAL INFORMATION

Catalog Number: 100343  
**Histamine Diphosphate**

**Structure:**



**Molecular Formula:** C<sub>5</sub>H<sub>9</sub>N<sub>3</sub> · 2H<sub>3</sub>PO<sub>4</sub>

**Molecular Weight:** 325.15

**CAS #:** 51-74-1

**Synonyms:** 2-(4-Imidazolyl) ethylamine diphosphate; Histamine acid phosphate; HAP; HDP

**Physical Description:** White crystalline powder

**Description:** Endogenous H<sub>1</sub> and H<sub>2</sub> agonist; H<sub>1</sub> activation mobilizes Ca<sup>2+</sup>; H<sub>2</sub> activation stimulates adenylate cyclase activity in neurons. Activates nitric oxide synthetase. Potent vasodilator.

**Solubility:** Soluble in water (50 mg/ml - clear, colorless to almost colorless solution). Exposure to fluorescent light at room temperature results in degradation of histamine solutions (up to 80% degradation within 7 days); aliquots stored in a dark refrigerator are stable up to 8 weeks (maintaining 83 to 94% initial concentration); aliquots stored at -20°C in the dark are stable up to one year; once solutions are removed from the refrigerator or freezer, the solutions should be used within 6 hours.<sup>4</sup> Solutions can be autoclaved with little degradation.<sup>5</sup>

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- Marshik, P., Moghaddam, S., Tebbett, I. and Hendeles, L., "Degradation of histamine solutions used for bronchoprovocation." *Chest*, **v. 115:1**, 194-199 (1999).
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