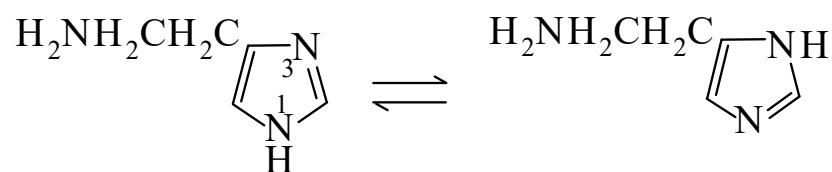




>>Entry Name: Histamine

Synonym(s): 1*H*-Imidazole-4-ethanamine, 9CI. 4-(2-Aminoethyl)-1*H*-imidazole. Ergamine



CAS Registry Number: 51-45-6

Molecular Formula: C₅H₉N₃

Molecular Weight: 111.146

Accurate Mass: 111.079647

Percentage Composition: C 54.03%; H 8.16%; N 37.81%

monocation capable of 1*H* <> 3*H* tautom.

Biological Source: Found in *Claviceps purpurea* and many other plants and animals

Use/Importance: Substance responsible for localised oedema response in mammalian tissues. Gastric secretion stimulant. Diagnostic aid

Melting Point: Mp 86°

Boiling Point: Bp_{0.8} 167°

Solubility: BERDY SOL: Sol. H₂O, MeOH

pKa Value: p*K*_{a1} 6.02; p*K*_{a2} 9.7 (25°, 0.1*M* KCl)

Hazard & Toxicity: Adverse human effects by subcutaneous (and other non-oral routes of) administration. Potent capillary dilator. Allergic skin effects. Exp. reprod. effects. LD₅₀ (rat, ivn) 630 mg/kg ; BERDY HAZD : LD₅₀ (mus, ims) 12 mg/kg

Aldrich: 27165-9

Fluka: 53290

Sigma: H7125

>>Derivative: Hydrochloride (1:2)

Synonym(s): Histamine dihydrochloride, USAN. Amin-Glaukosan. Histamyl. Imido. Peremin. Many other names

CAS Registry Number: 56-92-8

Use/Importance: Allergic therapy, diagnostic aid

Melting Point: Mp 244-246°

Hazard & Toxicity: Exp. reprod. effects. LD₅₀ (mus, ivn) 370 mg/kg

Aldrich: 11260-7

Fluka: 53300

Sigma: H7250

>>Derivative: Phosphate (1:2)

Synonym(s): Histamine phosphate, USAN. Histapon

CAS Registry Number: 6890-40-0

Extra CAS Registry Numbers(s): 51-74-1

Use/Importance: Gastric secretion stimulant

Melting Point: Mp 140°

>>Derivative: Dipicrate

Melting Point: Mp 239°

>>Derivative: ω-*N*-Ac

Synonym(s): *N*-Acetylhistamine

CAS Registry Number: 673-49-4

Molecular Formula: C₇H₁₁N₃O

Molecular Weight: 153.183

Accurate Mass: 153.090212

Percentage Composition: C 54.89%; H 7.24%; N 27.43%; O 10.44%

Biological Source: May be considered a regular constit. of amphibian skin whenever histamine is present in large amounts, e.g. *Litoria caerulea*, *Litoria aurea*, *Litoria moorei*. Isol. from leaves of *Spinacea oleracea*. Mammalian metab. of histamine