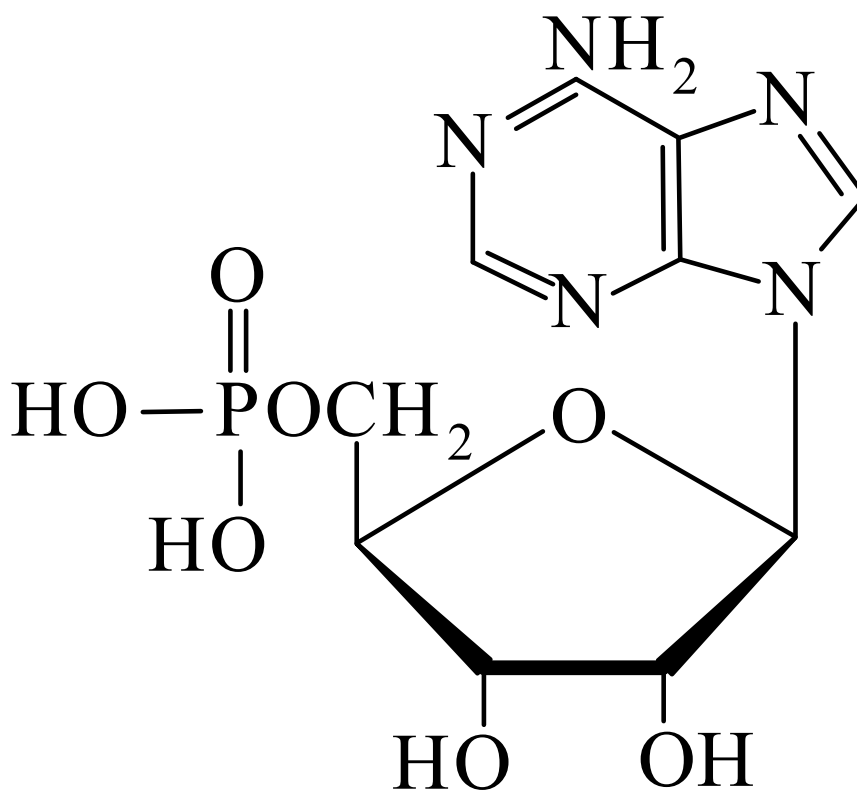




>>Entry Name: **Adenylic acid**, 9CI, 8CI

Synonym(s): Adenosine phosphate, BAN, INN, USAN. Adenosine 5'-phosphate. Adenosine 5'-monophosphate. Adenosine-5'-phosphoric acid. Muscle adenylic acid. AMP. 5'-Adenylic acid. Phosphaden. NSC 20264



CAS Registry Number: 61-19-8

Related CAS Registry Numbers(s): 485-84-7 4578-31-8 7384-99-8 13474-03-8 18422-05-4

Molecular Formula: C₁₀H₁₄N₅O₇P

Molecular Weight: 347.224

Accurate Mass: 347.063087

Percentage Composition: C 34.59%; H 4.06%; N 20.17%; O 32.25%; P 8.92%

Biological Source: Nucleoside widely distributed in nature. Isol. from muscle

Use/Importance: Has been used as an antiviral agent; nutrient

Melting Point: Mp 196-200°

Optical Rotation: $[\alpha]_D^{20}$ -47.5 (c, 2.0 in 2% NaOH). $[\alpha]_D^{20}$ -26 (c, 2.0 in 10% HCl)

pKa Value: pK_{a2} 3.74; pK_{a3} 6.05; pK_{a4} 13.1 (25°)

Other Data: λ_{max} 259 nm (ϵ 15 400) (H₂O). Component of numerous preparations

Hazard & Toxicity: Human systemic effects when used therapeutically incl. anaphylactoid reactions. Exp. reprod. effects. LD₅₀ (mus, ipr) 4000 mg/kg