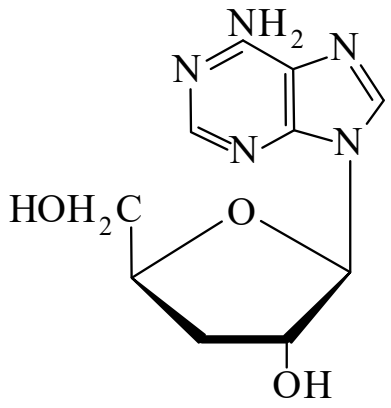
>>**Entry Name: Cordycepin,** 9CI, 8CI
Synonym(s): 3'-Deoxyadenosine, 9CI, 8CI. 9-Cordyceposidoadenosine. Adenine cordyceposide



CAS Registry Number: 73-03-0

Molecular Formula: $C_{10}H_{13}N_5O_3$
Molecular Weight: 251.244
Accurate Mass: 251.10184
Percentage Composition: C 47.81%; H 5.22%; N 27.87%; O 19.10%
Biological Source: Metab. of *Cordyceps militaris* and *Aspergillus nidulans*
Biological Use/Importance: Strong inhibitor of RNA synthesis showing cytostatic activity
Melting Point: Mp 222-224 ,° (230-231°)
Optical Rotation: $[\alpha]_D^{25}$ –44 (c, 0.5 in H_2O) (c, 9.4 in H_2O)
Solubility: Sol. H_2O; BERDY SOL: Sol. MeOH, EtOH, butanol, Me_2CO, acids; fairly sol. H_2O; poorly sol. $CHCl_3$, hexane
Calculated Log P Data: Log P –2.31 (calc)
UV: [neutral] λ_{max} 260 (ε 12000) (H_2O) (Derep) [acid] λ_{max} 260 () (HCl) (Berdy) [base] λ_{max} 260 () (NaOH) (Berdy) [acid] λ_{max} 259 (ε 13100) (pH 4 buffer) (Berdy) [neutral] λ_{max} 250 (ε 13100) (pH 4 buffer) [neutral] λ_{max} 260 (ε 13700) (pH 11 buffer)
Hazard & Toxicity: Exp. reprod. effects

Fluka: 30925
Sigma: C3394

>>**Derivative:** Picrate

Physical Description: Yellow needles
Melting Point: Mp 195 dec.°

>>**Derivative:** 5'-Triphosphate

CAS Registry Number: 73-04-1
Extra CAS Registry Numbers(s): 71997-32-5

Molecular Formula: $C_{10}H_{15}N_5O_{12}P_3$
Molecular Weight: 490.176
Accurate Mass: 489.993011
Percentage Composition: C 24.50%; H 3.08%; N 14.29%; O 39.17%; P 18.96%
Physical Description: No phys. props. reported

>>**Derivative:** 5'-Ac
Synonym(s): 5'-Acetyl-3'-deoxyadenosine. **5'-Acetylcordycepin**

CAS Registry Number: 137530-37-1

Molecular Formula: $C_{12}H_{15}N_5O_4$
Molecular Weight: 293.282
Accurate Mass: 293.112405
Percentage Composition: C 49.14%; H 5.15%; N 23.88%; O 21.82%
Biological Source: Isol. from *Emericella nidulans* var. *lata*
Physical Description: Needles ($CHCl_3$)
Melting Point: Mp 166-168°
Optical Rotation: $[\alpha]_D^{25}$ –21.2 (c, 0.5 in MeOH)
Solubility: BERDY SOL: Sol. MeOH
UV: [neutral] λ_{max} 258 (ε 17000) (MeOH) (Berdy)