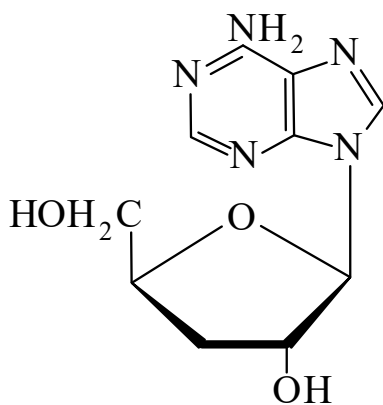




>>Entry Name: Cordycepin, 9Cl, 8Cl

Synonym(s): 3'-Deoxyadenosine, 9Cl, 8Cl. 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)