

# Certificate of Analysis

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**Product Name:** Cordycepin

**Catalog No.:** 2294

**Batch No.:** 3

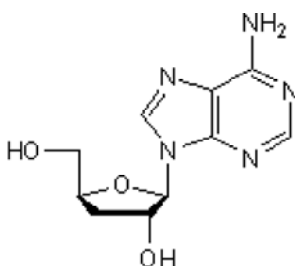
CAS Number: 73-03-0

EC Number: 200-791-4

IUPAC Name: 3'-Deoxyadenosine

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>10</sub>H<sub>13</sub>N<sub>5</sub>O<sub>3</sub>  
**Batch Molecular Weight:** 251.24  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
**Storage:** Desiccate at +4°C  
**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 99.3% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	47.81	5.22	27.87
Found	47.58	5.14	27.81

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Batch No.:** 3

CAS Number: 73-03-0

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IUPAC Name: 3'-Deoxyadenosine

**Description:**

Nucleoside analog that acts as an anticancer and antifungal agent. Can be converted to 3'-deoxyadenosine triphosphate (3'-dATP), which inhibits ATP-dependent DNA synthesis. Inhibits growth of various tumor cells in vitro.

**Physical and Chemical Properties:**

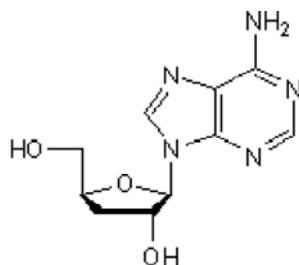
Batch Molecular Formula: C<sub>10</sub>H<sub>13</sub>N<sub>5</sub>O<sub>3</sub>

Batch Molecular Weight: 251.24

Physical Appearance: White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Desiccate at +4°C

**Solubility & Usage Info:**

DMSO to 100 mM

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**

**Kodama *et al*** (2000) Antileukemic activity and mechanism of action of cordycepin against terminal deoxynucleotidyl transferase-positive (TdT<sup>+</sup>) leukemic cells. *Biochem.Pharmacol.* **59** 273. PMID: 10609556.

**Sugar and McCaffrey** (1998) Antifungal activity of 3'-deoxyadenosine (cordycepin). *Antimicrob.Agents Chemother.* **42** 1424. PMID: 9624488.

**Gumport and Edelhei *et al*** (1976) The synthesis of 3'-dATP and its use as an inhibitor of ATP-dependent DNA synthesis in toluene-treated *Escherichia coli*. *Biochemistry* **15** 2804. PMID: 779831.

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