

Cordycepin Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Cordycepin

Catalog No.: CFN98566

Cas No.: 73-03-0

Purity: >=98%

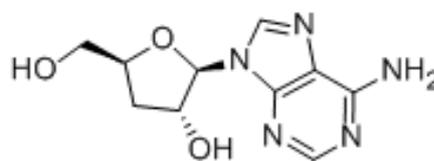
M.F: C₁₀H₁₃N₅O₃

M.W: 251.24

Physical Description: Powder

Synonyms:

3'-Deoxyadenosine; Cordycepin crystalline; 9-(3-Deoxypentofuranosyl)-9H-purin-6-amine;
9-(3-Deoxy-beta-D-threo-pentofuranosyl)-9H-purin-6-amine; 9-Cordyceposidoadenine.



[Intended Use]

1. Reference standards;
2. Pharmacological research;
3. Synthetic precursor compounds;
4. Intermediates & Fine Chemicals;
5. Others.

[Source]

The body of *Cordyceps sinensis* (Berkeley) Saccardo.

[Biological Activity or Inhibitors]

Cordycepin is reported to possess many pharmacological activities including immunological stimulating, anti-cancer, anti-virus and anti-infection activities; cordycepin inhibits the production of NO production by down-regulation of iNOS and COX-2 gene expression via the suppression of NF- κ B activation, Akt and p38 phosphorylation, thus, cordycepin may provide a potential therapeutic approach for inflammation-associated disorders.^[1]

Cordycepin is a selective growth inhibitor against *Clostridium* spp.^[2]

Cordycepin exerts inhibitory effects on the growth of mouse melanoma and lung carcinoma cells by stimulating adenosine A receptors on tumor cells. ^[3]

Cordycepin has antileukemic activity against terminal deoxynucleotidyl transferase-positive (TdT+) leukemic cells.^[4]

Cordycepin has antifungal activity , it and related compounds may provide another avenue for the discovery of clinically useful antifungal drugs.^[5]

Cordycepin exerts a potent neuroprotective function after cerebral ischemia/reperfusion.^[6]

Cordycepin has neuroprotective effects to inhibit glutamate-induced oxidative and ER stress-associated apoptosis in hippocampal HT22 cells.^[7]

[Solvent]

Pyridine, Methanol, Ethanol, etc.

[HPLC Method]^[8]

Mobile phase: H₂O-Ethanol-Formic acid =95:4:1;

Flow rate: 1.0 ml/min;

Column temperature: 25 °C;

The wave length of determination: 260 nm.

[Storage]

2-8°C, Protected from air and light, refrigerate or freeze.

[References]

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- [2] Ahn Y J, Park S J, Lee S G, *et al. J. Agr. Food Chem.*, 2000, 48(7):2744-8.
- [3] Nakamura K, Yoshikawa N Y, Kagota S, *et al. Anticancer Res.*, 2006, 26(1A):43-7.
- [4] Kodama E, Mccaffrey R K, Mitsuya H. *Biochem. Pharmacol.*, 2000, 59(3):273-81.
- [5] Sugar A M, Mccaffrey R P. *Antimicrob. Agents Ch.*, 1998, 42(6):1424-7.
- [6] Cheng Z, Wei H, Zhou X, *et al. Eur. J. Pharmacol.*, 2011, 664(1-3):20-8.
- [7] Mei L J, Sun Y P, Kim Y H, *et al. Neurotoxicology*, 2014, 41(3):102-11.
- [8] Song J F, Liu C Q, Da-Jing L I, *et al. Food Science*, 2008,29(4):352-4.

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