

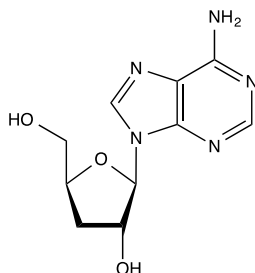
Catalog # 10-2408

Cordycepin

CAS# 73-03-0

3'-Deoxyadenosine; NSC 63984

Lot # X104322



An adenosine analog lacking the hydroxyl at the 3' position. Inhibits PARP¹ and polyadenylation². Displays anti-inflammatory effects^{1,3} and neuroprotective effects by inhibiting A β -induced apoptosis in hippocampal neurons⁴. Induces apoptosis in a variety of cancer cell lines⁵. Displays antiobesity effects.⁶ Inhibits cell senescence via activation of AMPK.⁷ Maintains stem cell pluripotency and increases iPS cell generation efficiency.⁸

- 1) Kim *et al.* (2011), *Cordycepin blocks lung injury-associated inflammation and promotes BRCA1-deficient breast cancer cell killing by effectively inhibiting PARP*; Mol.Med. **17** 893
- 2) Kondrashov *et al.* (2012), *Inhibition of polyadenylation reduces inflammatory gene induction*; RNA **18** 2236
- 3) Yang *et al.* (2017), *Cordycepin inhibits LPS-induced inflammatory response by modulating NOD-Like Receptor Protein 3 inflammasome activation*; Biomed.Pharmacother. **95** 1777
- 4) Song *et al.* (2018), *Neuroprotective effects of cordycepin inhibit A β -induced apoptosis in hippocampal neurons*; Neurotoxicology **68** 73
- 5) Zhang *et al.* (2018), *Cordycepin induces apoptosis in human pancreatic cancer cells via the mitochondrial-mediated intrinsic pathway and suppresses tumor growth in vivo*; OncoTargets Ther. **11** 4479
- 6) Li *et al.* (2018), *Cordycepin modulates body weight by reducing prolactin via an adenosine A1 receptor*; Curr.Pharm.Des. Aug.20 epub
- 7) Wang *et al.* (2019) *Cordycepin prevents radiation ulcer by inhibiting cell senescence via NRF2 and SMPK in rodents*; Nat. Commun. **10** 2538
- 8) Wang *et al.* (2020) *The novel application of cordycepin in maintaining stem cell pluripotency and increasing iPS cell generation efficiency*; Sci. Rep. **10** 2187

PHYSICAL DATA

Molecular Weight:	251.24
Molecular Formula:	C ₁₀ H ₁₃ N ₅ O ₃
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (25 mg/mL)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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