

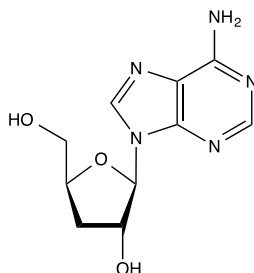
**Catalog # 10-2408**

**Cordycepin**

CAS# 73-03-0

3'-Deoxyadenosine; NSC 63984

Lot # X104322



An adenosine analog lacking the hydroxyl at the 3' position. Inhibits PARP<sup>1</sup> and polyadenylation<sup>2</sup>. Displays anti-inflammatory effects<sup>1,3</sup> and neuroprotective effects by inhibiting A $\beta$ -induced apoptosis in hippocampal neurons<sup>4</sup>. Induces apoptosis in a variety of cancer cell lines<sup>5</sup>. Displays antiobesity effects.<sup>6</sup> Inhibits cell senescence via activation of AMPK.<sup>7</sup> Maintains stem cell pluripotency and increases iPS cell generation efficiency.<sup>8</sup>

- 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 $\beta$ -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 <sub>10</sub> H <sub>13</sub> N <sub>5</sub> O <sub>3</sub>
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.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**