

Bioactive

Phosphodiesterase I (*C. adamanteus*)

Catalog # P5263 Size 100 Units

Specification

Product Description	Lyophilized.
Biological function	Venom exonuclease (Phosphodiesterase I) successively hydrolyzes 5'-mononucleotides from 3'-hydroxy-terminated ribo- and deoxyribo-oligonucleotides.
Host	Snake
Theoretical MW (kDa)	115
Form	Lyophilized
Preparation Method	Native protein purified from <i>Crotalus adamanteus</i> Venom according to the method of Williams, Sung and Laskowski, J. Biol. Chem., 236, 1130 (1961). Further treated to inactivate contaminating 5'-nucleotidase activity according to Sulkowski and Laskowski: Biochim. Biophys. Acta, 240, 443 (1961).
Activity	≥ 20 units per mg dry weight. One Unit hydrolyzes one micromole of p-nitrophenyl thymidine-5-phosphate per minute at 25°C, pH 8.9.
Recommend Usage	Phosphodiesterase I Assay; Structural and sequence studies of nucleic acids.
Storage Instruction	Store at -20°C.

Applications

- Enzyme Activity

Publication Reference

- [Effective delivery of STING agonist using exosomes suppresses tumor growth and enhances antitumor immunity.](#)

Kathleen M. McAndrews, Sara P. Y. Che, Valerie S. LeBleu, Raghu Kalluri.

The Journal of Biological Chemistry 2021 Mar; 296:100523.

Application: Incubation, Human, 293T cells

- [Isotope-dilution mass spectrometry for exact quantification of noncanonical DNA nucleosides.](#)

Traube FR, Schiffers S, Iwan K, Kellner S, Spada F, Müller M, Carell T.

Nature Protocols 2019 Jan; 14(1):283.

Application: Func, Human, Mouse, HEK 293T cells, Mouse cerebellum

- [Equilibrium and ultrafast kinetic studies manipulating electron transfer: a short-lived flavin semiquinone is not sufficient for electron bifurcation.](#)

Hoben JP, Lubner CE, Ratzloff MW, Schut GJ, Nguyen DMN, Hempel KW, Adams MWW, King PW, Miller AF.

The Journal of Biological Chemistry 2017 Jun; 292(34):14039.

Application: Func, Pyrococcus furiosus, Recombinant protein