Creative Enzymes®

Native Crotalus adamanteus venom Phosphodiesterase I

Cat. No. NATE-0512

Lot. No. (See product label)

Introduction

Description	Venom exonuclease (Phosphodiesterase I) successively hydrolyzes 5'-mononucleotides from 3'-OH-terminated ribo- and deoxyribo-oligonucleotides. The enzyme has an optimal pH range of 9.8-10.4 and a molecular weight of 115 kDa. Phosphodiesterase is inhibited by reducing agents such as glutathione, cysteine and ascorbic acids. It is completely inhibited by 5mM EDTA while ATP, ADP and AMP are partial inhibitors. The enzyme has an absolute requirement for Mg2+.
Synonyms	Phosphodiesterase I; EC 3.1.4.1; 5'-exonuclease; 5'-phosphodiesterase; 5'-nucleotide phosphodiesterase; oligonucleate 5'-nucleotidohydrolase; 5' nucleotide phosphodiesterase/alkaline phosphodiesterase I; 5'-NPDase; 5'-PDase; 5'-PDE; 5'NPDE; alkaline phosphodiesterase; nucleotide pyrophosphatase/phosphodiesterase I; orthophosphoric diester phosphohydrolase; PDE I; phosphodiesterase; exonuclease I

Product Information

Source	Crotalus adamanteus venom
Form	Lyophilized in vials.
EC Number	EC 3.1.4.1
CAS No.	9025-82-5
Activity	> 20 units per mg dry weight
Unit Definition	One Unit hydrolyzes one micromole of p-nitrophenyl thymidine-5-phosphate per minute at 25°C, pH 8.9.

Storage and Shipping Information

Storage	−20°C