Creative Enzymes®

Native Streptomyces sp. Phospholipase D

Cat. No. NATE-0597

Lot. No. (See product label)

Introduction

Description	Phospholipase D (PLD) is glycerophospholipid-specific. It is markedly less active on sphingomyelins and lysophospholipids. Phospholipase D hydrolyzes the phosphate bonds of phospholipids and sphingomyelin to give the corresponding phosphatidic acid.
Applications	Phospholipase D (PLD) has been used to hydrolyze the phosphate bonds of phospholipids and sphingomyelin to yield the corresponding phosphatidic acid. It has also been used to study metabolic labeling and direct imaging of choline phospholipids in vivo by measuring propargyl-Cho incorporation. Furthermore, PLD has been used in purification and kinetic studies. The enzyme has been used in the translocation of sphingosine kinase 1 (SK1) to membrane fractions under in vitro conditions. It has also been used to produce phosphatidic acid (PA) from phosphatidylcholine (PC) in HL60 permeabilized cells.
Synonyms	phospholipase D; lipophosphodiesterase II; lecithinase D; choline phosphatase; phosphatidylcholine phosphatidohydrolase; EC 3.1.4.4; 9001-87-0; PLD

Product Information

Source	Streptomyces sp.
Form	Type VII, lyophilized powder
EC Number	EC 3.1.4.4
CAS No.	9001-87-0
Activity	> 150 units/mg solid
Unit Definition	One unit will liberate 1.0 μmol of choline from L-α-phosphatidylcholine (egg yolk) per hr at pH 5.6 at 30°C.

Usage and Packaging

Package	Bottomless glass bottle. Contents are inside inserted fused cone.

Storage and Shipping Information

Storage	−20°C