Creative Enzymes®

Pectate Lyase from Clostridium acetobutylicum, Recombinant

Cat. No. NATE-1223

Lot. No. (See product label)

Introduction

Description	Pectate lyase (EC 4.2.2.2) is an enzyme involved in the maceration and soft rotting of plant tissue. Pectate lyase is responsible for the eliminative cleavage of pectate, yielding oligosaccharides with 4-deoxy-α-D-mann-4-enuronosyl groups at their non-reducing ends. The protein is maximally expressed late in pollen development. It has been suggested that the pollen expression of pectate lyase genes might relate to a requirement for pectin degradation during pollen tube growth. This enzyme belongs to the family of lyases, specifically those carbon-oxygen lyases acting on polysaccharides.
Synonyms	(1->4)-alpha-D-galacturonan lyase; polygalacturonic transeliminase; pectic acid transeliminase; polygalacturonate lyase; endopectin methyltranseliminase; pectate transeliminase; endogalacturonate transeliminase; pectic acid lyase; pectic lyase; alpha-1,4-D-endopolygalacturonic acid lyase; PGA lyase; PPase-N; endo-alpha-1,4-polygalacturonic acid lyase; polygalacturonic acid lyase; pectin trans-eliminase; Polygalacturonic acid trans-eliminase; Pectate lyase; EC 4.2.2.2

Product Information

Source	Clostridium acetobutylicum ATCC 824
Form	Supplied in 3.2 M ammonium sulphate
EC Number	EC 4.2.2.2
CAS No.	9015-75-2
Molecular Weight	26628.7 Da
Purity	> 95 % as judged by SDS-PAGE
Activity	3.2 U/mg
Concentration	21 U/ml
Optimum pH	~ 7.0
Optimum temperature	37°C
Unit Definition	One unit is defined as the amount of enzyme required to release 1µmol of 4,5-unsaturated galacturonide product per minute from 1.3 mg/mL polygalacturonic acid in 50 mM Tris-HCl buffer, pH 8.5, containing 0.1 mM CaCl2, at 37°C, as measured at 232 nm.

Usage and Packaging

Preparation Instructions	Agitate vial sufficiently to fully homogenise enzyme precipitate before use.

Storage and Shipping Information

Storage	Store at 4°C (shipped at room temperature)