Creative Enzymes®

Pectate Lyase from Clostridium thermocellum, Recombinant

Cat. No. NATE-1556

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

Species	Clostridium thermocellum
Source	E. coli
Form	35 mM NaHepes buffer, pH 7.5, 750 mM NaCl, 200 mM imidazol, 3.5 mM CaCl2, 0.02% sodium azide and 25% (v/v) glycerol
EC Number	EC 4.2.2.2
CAS No.	9015-75-2
Molecular Weight	33.8 kDa
Purity	>90% as judged by SDS-PAGE
Concentration	1 mg/mL
Optimum pH	7.0-10.4
Optimum temperature	55 °C
Specificity	Polygalacturonic acid (PGA) and pectin (up to 55% methyl-esterified) from citrus fruits

Storage and Shipping Information

Storage	This enzyme is shipped at room temperature but should be stored at -20 °C.