

## 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- $\alpha$ -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 transeliminase; Polygalacturonic acid trans-eliminase; Pectate lyase; EC 4.2.2.2

### Product Information

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