

CZ0247\_UG\_EN\_V2302

# Pectate lyase 1A, Dickeya dadantii

# DdPel1A (PL1)

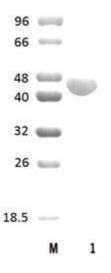
| Catalogue number | Presentation |  |
|------------------|--------------|--|
| CZ02471          | 1 mg         |  |
| CZ02472          | 3 x 1 mg     |  |

## Description

Pectate lyase 1A (*Dd*Pel1A), assigned the E.C. number 4.2.2.2, is a derivative of *Dickeya dadantii*. It is an endo-1,4-α-polygalacturonic acid lyase. The recombinant *Dd*Pel1A, purified from *Escherichia coli*, is a single-domain Pectate Lyase family 1 (PL1) enzyme (see more details at <u>www.cazy.org</u>). The protein is supplied in a solution containing 35 mM NaHepes buffer (pH 7.5), 750 mM NaCl, 200 mM Imidazole, 3.5 mM CaCl<sub>2</sub>, and 25% (v/v) glycerol, at a concentration of 1 mg/mL. Bulk quantities of this product can be made available upon request. To place an order, simply visit our website. We offer fast and secure shipping worldwide.

#### **Electrophoretic Purity**

The molecular integrity and purity of *Dd*Pel1A (PL1) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).



**Figure 1**. SDS-PAGE analysis of *Dd*Pel1A (PL1) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 44,18 kDa. Lane M contains a Protein Marker for reference.

#### Storage temperature

The protein should be stored at -30°C to -15°C in a constant temperature freezer. The protein will remain stable till the expiry date if stored as specified.

#### Substrate specificity

DdPel1A (PL1) participates in the eliminative cleavage of methylesterified citrus pectins.

#### Temperature and pH optima

The pH optimum for enzymatic activity is 8.5 while temperature optimum is 37 °C.

# **Enzyme activity**

The substrate specificity and kinetic properties of *Dd*Pel1A (PL1) are detailed in the referenced publication provided below. To perform enzyme assays and determine specific activity values, adhere to the methodology outlined in the cited paper(s).

#### Reference

Pissavin et al. (1998) Biochim Biophys Acta. 1383(2):188-96.

## **Customer Support**

Our dedicated customer support team is always ready to assist you with any questions or technical issues you may have. Reach us via email at info@nzytech.com.

# **Quality control assay**

Protein purity is determined to be ≥90%, as assessed by SDS-PAGE and subsequent BlueSafe staining (MB15201).

For life science research only. Not for use in diagnostic procedures.

NZYtech Lda. Estrada do Paço do Lumiar, Campus do Lumiar - Edifício E, R/C, 1649-038 Lisboa, Portugal Tel.:+351.213643514 Fax: +351.217151168 www.nzytech.com