

CZ0208\_UG\_EN\_V2302

# Pectate lyase 10A, Cellvibrio japonicus

# CjPel10A (PL10)

Catalogue number Presentation

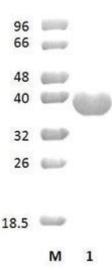
CZ02081 1 mg CZ02082 3 x 1 mg

#### **Description**

Pectate lyase 10A (*Cj*Pel10A), assigned the E.C. number 4.2.2.2, is a derivative of *Cellvibrio japonicus*. It is an endo-1,4-α-polygalacturonic acid lyase. The recombinant *Cj*Pel10A, purified from *Escherichia coli*, is a single-domain Pectate Lyase family 10 (PL10) enzyme (see more details at <a href="https://www.cazy.org">www.cazy.org</a>). 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 *Cj*Pel10A (PL10) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).



**Figure 1**. SDS-PAGE analysis of *CjPel10A* (PL10) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 38,06 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**

C/Pel10A (PL10) participates in the eliminative cleavage of pectate an pectin, although it displays lower activity against esterified citrus pectins.

#### Temperature and pH optima

The enzyme exhibits optimal activity within a pH range of 9.5-10.5 and at a temperature of 62°C. Maximal enzymatic activity is achieved at pH 10 and a consistent temperature of 62°C.

## **Enzyme activity**

The substrate specificity and kinetic properties of *Cj*Pel10A (PL10) 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

Brown et al. (2001) Biochem J. 355(Pt 1):155-65.

# **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.