

CZ0067 UG EN V2303

# Rhamnogalacturonan endolyase 11A, Cellvibrio japonicus

# *Cj*Rge11A (PL11)

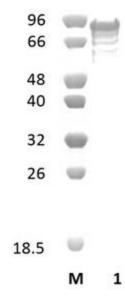
Catalogue numberPresentationCZ006750.25 mgCZ006763 x 0.25 mg

## **Description**

Rhamnogalacturonan endolyase 11A (CjRge11A), assigned the E.C. number 4.2.2.23, is a derivative of *Cellvibrio japonicus*. It is an enzyme that participates in the endotype eliminative cleavage of L- $\alpha$ -rhamnopyranosyl-1,4- $\alpha$ -D-galactopyranosyluronic acid bonds of rhamnogalacturonan I domains in ramified hairy regions of pectin leaving L-rhamnopyranose at the reducing end and 4-deoxy-4,5-unsaturated D-galactopyranosyluronic acid at the non-reducing end. The recombinant CjRge11A, purified from *Escherichia coli*, is a single-domain Pectate Lyase family 11 (PL11) 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 0.25 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*Rge11A (PL11) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).



**Figure 1**. SDS-PAGE analysis of *Cj*Rge11A (PL11) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 79,64 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

 $\it Cj$ Rge11A (PL11) participates in the eliminative cleavage of rhamnogalacturonan.

## Temperature and pH optima

The enzyme exhibits optimal activity within a pH range of 9.0-10.0 and at a temperature of 45°C. Maximal enzymatic activity is achieved at pH 9.5 and a consistent temperature of 45°C.

#### **Enzyme activity**

The substrate specificity and kinetic properties of *Cj*Rge11A (PL11) 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

McKie et al. (2001) Biochemical Journal 355, 167-177.

## **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 ≥75%, as assessed by SDS-PAGE and subsequent BlueSafe staining (MB15201).

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