

CZ0040\_UG\_EN\_V2302

## Rhamnogalacturonan Lyase 11A, Clostridium thermocellum

# CtRgl11A (PL11)

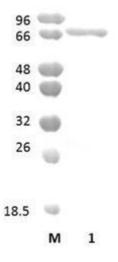
Catalogue number	Presentation
CZ00403	0.25 mg
CZ00404	3 x 0.25 mg

## Description

Rhamnogalacturonan Lyase 11A (*Ct*Rgl11A), assigned the E.C. number 4.2.2.-, is a derivative of *Clostridium thermocellum*. It is an endo-1,4- $\alpha$ -rhamnogalacturonan lyase. The recombinant *Ct*Rgl11A, purified from *Escherichia coli*, is a single-domain Pectate Lyase family 11 (PL11) 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 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 *Ct*Rgl11A (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 *Ct*Rgl11A (PL11) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 76,14 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

CtRgl11A (PL11) participates in the eliminative cleavage of rhamnogalacturonan.

## Temperature and pH optima

The enzyme exhibits optimal activity within a pH range of 8.0-10.0 and at a temperature of 65°C. Maximal enzymatic activity is achieved at pH 8.5 and a consistent temperature of 65°C.

## **Enzyme activity**

The substrate specificity and kinetic properties of CtRgl11A (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

Dhillon et al. (2016) Mol Biotechnol. 58(4):232-240.

## **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.

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