

CZ1078\_UG\_EN\_V2302

# Alginate lyase 7A, Rhodopirellula baltica

# RbAgI7A (PL7)

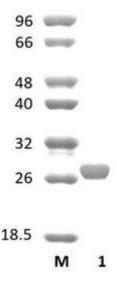
Catalogue number	Presentation
CZ10781	1 mg
CZ10782	3 x 1 mg

## Description

Alginate lyase 7A (*Rb*Agl7A), assigned the E.C. number 4.2.2.-, is a derivative of *Rhodopirellula baltica*. It is an enzyme that acts on alginate. The recombinant *Rb*Agl7A, purified from *Escherichia coli*, is a single-domain Pectate Lyase family 7 (PL7) 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 *Rb*Agl7A (PL7) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).



**Figure 1**. SDS-PAGE analysis of *Rb*AgI7A (PL7) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 26,70 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

RbAgl7A (PL7) participates in the eliminative cleavage of alginates.

# Temperature and pH optima

The enzyme exhibits optimal activity within a pH range of 6.5-7.5 and at a temperature of 37°C. Maximal enzymatic activity is achieved at pH 7 and a consistent temperature of 37°C.

# **Enzyme activity**

The substrate specificity and kinetic properties of *Rb*Agl7A (PL7) 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).

## **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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