

CZ0179\_UG\_EN\_V2302

# $\alpha$ -Rhamnosidase 78A, Streptomyces avermitilis

# SaRam78A (GH78)

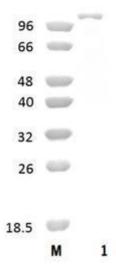
Catalogue number	Presentation
CZ01791	1 mg
CZ01792	3 x 1 mg

## Description

 $\alpha$ -Rhamnosidase 78A (*Sa*Ram78A), assigned the E.C. number 3.2.1.40, is a derivative of *Streptomyces avermitilis*. It is an enzyme that participates in the hydrolysis of terminal non-reducing  $\alpha$ -L-rhamnose residues in  $\alpha$ -L-rhamnosides. The recombinant *Sa*Ram78A, purified from *Escherichia coli*, is a single-domain Glycoside Hydrolase family 78 (GH78) 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 SaRam78A (GH78) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).



**Figure 1**. SDS-PAGE analysis of *Sa*Ram78A (GH78) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 112,9 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

SaRam78A (GH78) hydrolyses undecorated rhamnogalacturonans.

#### Temperature and pH optima

The pH optimum for enzymatic activity is 6 while temperature optimum is 50 °C.

# **Enzyme activity**

The substrate specificity and kinetic properties of *Sa*Ram78A (GH78) 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

Fujimoto et al. (2013) J Biol Chem. 288, 12376-12385.

Ichinose et al. (2013) Biosci Biotechnol Biochem. 77(1):213-6.

#### **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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