

CZ0902\_UG\_EN\_V2302

# Arabinanase 43A, Ruminococcus champanellensis

# RcAbn43A (GH43-CBM61-doc)

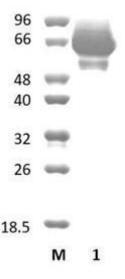
Catalogue number	Presentation
CZ09021	1 mg
CZ09022	3 x 1 mg

#### Description

Arabinanase 43A (*Rc*Abn43A), assigned the E.C. number 3.2.1.99, is a derivative of *Ruminococcus champanellensis*. It is an endo-1,5- $\alpha$ -arabinanase. The recombinant *Rc*Abn43A, purified from *Escherichia coli*, is a modular Glycoside Hydrolase family 43 (GH43-CBM61-doc) 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 *Rc*Abn43A (GH43-CBM61-doc) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).



**Figure 1**. SDS-PAGE analysis of *Rc*Abn43A (GH43-CBM61-doc) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 76,82 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

RcAbn43A (GH43-CBM61-doc) hydrolyses arabinan.

#### Temperature and pH optima

The pH optimum for enzymatic activity is 6 while temperature optimum is 37 °C.

# **Enzyme activity**

The substrate specificity and kinetic properties of *Rc*Abn43A (GH43-CBM61-doc) 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

Moraïs et al. (2016) Environ Microbiol. 18(2):542-56.

### **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.

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