

## **$\alpha$ -Galactosidase 27A, *Cellvibrio mixtus***

### ***CmGal27A (GH27)***

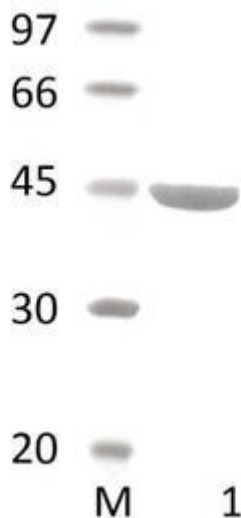
<b>Catalogue number</b>	<b>Presentation</b>
CZ00261	1.2 mg
CZ00262	3 x 1.2 mg

#### **Description**

$\alpha$ -Galactosidase 27A (*CmGal27A*), assigned the E.C. number 3.2.1.22, is a derivative of *Cellvibrio mixtus*. It is an  $\alpha$ -galactosidase. The recombinant *CmGal27A*, purified from *Escherichia coli*, is a single-domain Glycoside Hydrolase family 27 (GH27) enzyme (see more details at [www.cazy.org](http://www.cazy.org)). 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 1.2 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 *CmGal27A* (GH27) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).



**Figure 1.** SDS-PAGE analysis of *CmGal27A* (GH27) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 44,58 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**

*CmGal27A* (GH27) hydrolyses galactose side-chains from galactomannans.

#### **Temperature and pH optima**

The enzyme exhibits optimal activity within a pH range of 8.0-9.5 and at a temperature of 37°C. Maximal enzymatic activity is achieved at pH 8.5 and a consistent temperature of 37°C.

### Specific activity

*CmGal27A* (GH27) specific activity is 150 U/mg, using galactomannan as substrate.

### Enzyme activity

Substrate specificity and kinetic properties of *CmGal27A* (GH27) 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

Centeno *et al.* (2006) FEMS Microbiol. Letters 261, 123-132.

### 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](mailto:info@nzytech.com).

### Quality control assay

Protein purity is determined to be  $\geq 90\%$ , as assessed by SDS-PAGE and subsequent BlueSafe staining (MB15201).

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