

## Cellulase 131A, *Podospora anserina*

### *PaCel131A* (GH131-CBM1)

Catalogue number	Presentation
CZ02961	0.5 mg
CZ02962	3 x 0.5 mg

#### Description

Cellulase 131A (*PaCel131A*), assigned the E.C. number 3.2.1.21 and 3.2.1.58, is a derivative of *Podospora anserina*. It is an enzyme that displays a broad exo-1,3/1,6- $\beta$ -glucanase specificity with endo- $\beta$ -1,4-glucanase activity. The recombinant *PaCel131A*, purified from *Pichia pastoris*, is a modular Glycoside Hydrolase family 131 (GH131-CBM1) 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 0.5 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 *PaCel131A* (GH131-CBM1) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).



**Figure 1.** SDS-PAGE analysis of *PaCel131A* (GH131-CBM1) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 66 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

*PaCel131A* (GH131-CBM1) hydrolyses 1,3- $\beta$ , 1,4- $\beta$ , 1,3-1,4- $\beta$  and 1,6- $\beta$ -glucans displaying highest specificity for laminarin.

#### Temperature and pH optima

The enzyme exhibits optimal activity within a pH range of 4.5-7.0 and at a temperature of 40°C. Maximal enzymatic activity is achieved at pH 5.5 and a consistent temperature of 40°C.

## Enzyme activity

The substrate specificity and kinetic properties of PaCel131A (GH131-CBM1) 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

Lafond *et al.* (2012) Applied and Environmental Microbiology 78, 8540–8546.

## 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.