CZ0959_UG_EN_V2302

Lytic cellulose monooxygenase 9B, *Geotrichum candidum*

*Gc*Lpmo9B (AA9)

Catalogue number	Presentation
CZ09591	1 mg
CZ09592	3 x 1 mg

Description

Lytic cellulose monooxygenase 9B (*Gc*Lpmo9B), assigned the E.C. number 1.-.-.-, is a derivative of *Geotrichum candidum*. It is a copper-dependent lytic polysaccharide monooxygenase (LPMO). The recombinant *Gc*Lpmo9B, purified from *Pichia Pastoris*, is a single-domain Auxiliar Activity enzyme family 9 (AA9) enzyme (see more details at 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 $CaCl_2$, 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 *Gc*Lpmo9B (AA9) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).

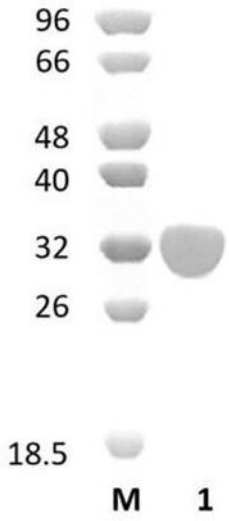

Figure 1. SDS-PAGE analysis of *Gc*Lpmo9B (AA9) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 32 kDa. Lane M contains a Protein Marker for reference.

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

*Gc*Lpmo9B (AA9) hydrolyses cellulose and xyloglucan.

Temperature and pH optima

The pH optimum for enzymatic activity is 5 while temperature optimum is 40 °C.

Enzyme activity

The substrate specificity and kinetic properties of *Gc*Lpmo9B (AA9) 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

Ladevèze *et al.* (2017) Biotechnol Biofuels. 10:215.

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).