

CZ0326 UG EN V2302

# Lichenase 16D, Ruminococcus flavefaciens

# RfLic16D (GH16)

Catalogue number Presentation

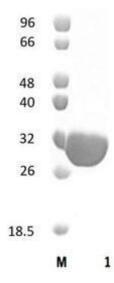
CZ03261 1 mg CZ03262 3 x 1 mg

### **Description**

Lichenase 16D (*Rf*Lic16D), assigned the E.C. number 3.2.1.73, is a derivative of *Ruminococcus flavefaciens*. It is an endo-1,3-1,4-β-glucanase. The recombinant *Rf*Lic16D, purified from *Escherichia coli*, is a single-domain Glycoside Hydrolase family 16 (GH16) enzyme (see more details at <a href="https://www.cazy.org">www.cazy.org</a>). 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 RfLic16D (GH16) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).



**Figure 1**. SDS-PAGE analysis of *Rf*Lic16D (GH16) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 30,58 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**

RfLic16D (GH16) hydrolyses 1,3-1,4-β-glucans, in particular lichenan.

## Temperature and pH optima

The pH optimum for enzymatic activity is 6.8 while temperature optimum is 37 °C.

# **Enzyme activity**

The substrate specificity and kinetic properties of *Rf*Lic16D (GH16) 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

Flint et al. (1993) J Bacteriol. 175(10):2943-51.

# **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.