

CZ0731 UG EN V2302

# Chitinase 19A, Streptomyces coelicolor

# ScChi19A (GH19)

Catalogue number Presentation

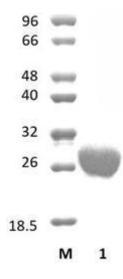
CZ07311 1 mg CZ07312 3 x 1 mg

#### **Description**

Chitinase 19A (ScChi19A), assigned the E.C. number 3.2.1.14, is a derivative of  $Streptomyces\ coelicolor$ . It is a 1,4- $\beta$ -chitinase. The recombinant ScChi19A, purified from  $Escherichia\ coli$ , is a single-domain Glycoside Hydrolase family 19 (GH19) enzyme (see more details at  $\underline{www.cazy.org}$ ). 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 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 ScChi19A (GH19) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).



**Figure 1**. SDS-PAGE analysis of *Sc*Chi19A (GH19) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 25,22 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**

ScChi19A (GH19) hydrolyses chitooligosaccharides.

#### Temperature and pH optima

The pH optimum for enzymatic activity is 6 while temperature optimum is 25 °C.

## **Enzyme activity**

The substrate specificity and kinetic properties of *Sc*Chi19A (GH19) 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

Hoell et al. (2006) FEBS J. 273(21):4889-900.

## **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.