

Levanase 32B, *Bacillus subtilis* BsLev32B (GH32-CBM66)

Catalogue number:

CZ05081, 0.5 mg
CZ05082, 3 × 0.5 mg

Description

BsLev32B (GH32-CBM66), BsLM_2656, E.C. number 3.2.1.65, is an endo-2,6- β -fructanase from *Bacillus subtilis*. Recombinant BsLev32B (GH32-CBM66), purified from *Escherichia coli*, is a modular family 32 Glycoside Hydrolase (GH32) with a C-terminal family 66 Carbohydrate Binding Module (CBM66) (www.cazy.org). The enzyme is provided in 35 mM NaHepes buffer, pH 7.5, 750 mM NaCl, 200 mM imidazol, 3.5 mM CaCl₂ and 25% (v/v) glycerol, at a 0.5 mg/mL concentration. Bulk quantities of this product are available on request.

Electrophoretic Purity

BsLev32B (GH32-CBM66) purity was determined by sodium dodecyl sulfate polyacrylamide gel electrophoresis (SDS-PAGE) followed by BlueSafe staining (MB15201) (Figure 1).

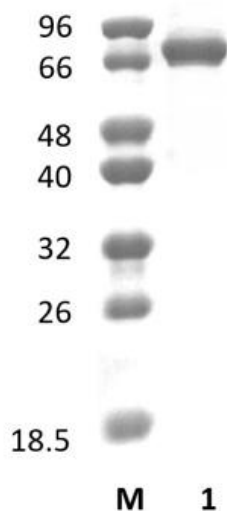


Figure 1. SDS-PAGE analysis of BsLev32B (GH32-CBM66) (Lane 1). Electrophoresis was performed using a 14% polyacrylamide gel. The Mw of the enzyme is 76,74 kDa. Lane M contains NZYTech Low Molecular Weight (LMW) Protein Marker (MB082).

Storage temperature

This enzyme should be stored at -20 °C.

Substrate specificity

BsLev32B (GH32-CBM66) hydrolyses levans.

Temperature and pH optima

The pH optimum for enzymatic activity is 7 while temperature optimum is 37 °C.

Enzyme activity

Substrate specificity and kinetic properties of BsLev32B (GH32-CBM66) are described in the reference provided below. Follow the instructions described in the paper for the implementation of enzyme assays and to obtain values of specific activity. To measure catalytic activity of GHs, quantify reducing sugars released from polysaccharides through the method described by Miller (1959; Anal. Chem. 31, 426-428).

Reference

Cuskin *et al.* Proc Natl Acad Sci U S A. 2012 Dec 18;109(51):20889-94.

Quality control assay

Protein purity is $\geq 90\%$ as judged by SDS-PAGE followed by BlueSafe staining (MB15201).

Certificate of Analysis

Test	Criteria	Result
Protein purity	Purity in line with the stated value	Meets specification

Approved by:



Patrícia Ponte
Senior Manager, Quality Systems

For research use only



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