CZ0045_UG_EN_V2302

Carbohydrate Binding Module 22A, *Clostridium thermocellum* (CBM22)

Catalogue number	Presentation
CZ00451	0.5 mg
CZ00452	3 x 0.5 mg

Description

Carbohydrate Binding Module 22A (CBM22) is a Carbohydrate Binding Protein originating from *Clostridium thermocellum*. The recombinant CBM22, purified from *Escherichia coli*, is a single-domain protein belonging to the Carbohydrate Binding Module family 22 (CBM22, 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 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 CBM22 were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).

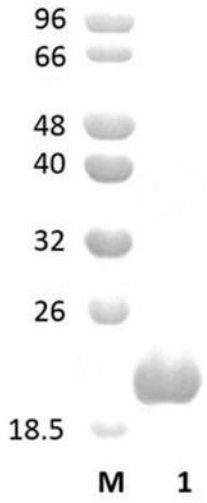

Figure 1. SDS-PAGE analysis of CBM22 was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 20,10 kDa. Lane M contains a Protein Marker for reference.

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.

Ligand specificity

CBM22 binds to decorated and undecorated 1,4-β-xylans. CBM22 also binds to 1,3-1,4-β-glucans. The biochemical properties of CBM22 are detailed in the referenced publication(s) provided below.

Reference

Fontes *et al*. (1995) Biochem J. 307 (Pt 1)(Pt 1):151-8.

Charnock *et al*. (2000) Biochemistry 39, 5013-5021.

Xie *et al.* (2001) Biochemistry 40, 9167-9176.

PDB/3D code: 1DYO[A,B], 1H6X[A], 1H6Y[A,B].

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).