

## Carbohydrate Binding Module 2b-1, *Cellulomonas fimi*

### (GFP-CBM2b-1)

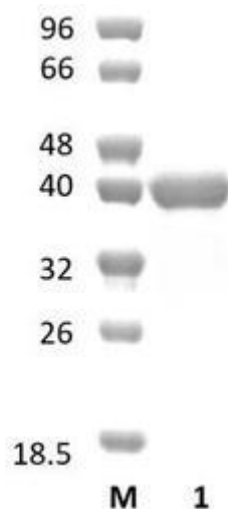
Catalogue number	Presentation
CZ05021	1 mg
CZ05022	3 x 1 mg

#### Description

Carbohydrate Binding Module 2b-1 (GFP-CBM2b-1) is a Carbohydrate Binding Protein originating from *Cellulomonas fimi*. The recombinant GFP-CBM2b-1, purified from *Escherichia coli*, is a modular protein belonging to the Carbohydrate Binding Module family 2b-1 (CBM2b-1, see more details at [www.cazy.org](http://www.cazy.org)) fused to an N-terminal Green Fluorescent Protein (GFP). This GFP protein derivative is particularly recommended for subcellular localization studies, which allows for real-time tracking and imaging in living cells. 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 3.2 M ammonium sulphate, 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 GFP-CBM2b-1 were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).



**Figure 1.** SDS-PAGE analysis of GFP-CBM2b-1 was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 39,47 kDa. Lane M contains a Protein Marker for reference.

#### Storage temperature

The protein should be stored at 2°C to 8°C in a constant temperature freezer. The protein will remain stable till the expiry date if stored as specified.

#### Ligand specificity

GFP-CBM2b-1 binds to 1,4-β-xylans. The biochemical properties of GFP-CBM2b-1 are detailed in the referenced publication(s) provided below.

## Assay conditions

For optimal recovery of GFP-CBM2b-1 activity, carry out the following procedure: centrifuge the necessary volume of the precipitated protein suspension at 13,000 x g for a duration of 5 minutes. Subsequently, decant the ammonium sulphate supernatant and resuspend the resultant pellet in an equivalent volume of solution, comprising 20 mM Tris-HCl (pH 7.5), 20 mM NaCl, and 5 mM CaCl<sub>2</sub>. Following resuspension, proceed to the appropriate assay as dictated by your experimental requirements.

## Reference

Simpson *et al.* (1999) *Structure* 7, 853-864.

Simpson *et al.* (2000) *J Biol Chem.* 275, 41137-41142.

PDB/3D code: 1E5B[A], 1E5C[A], 1XBD[A], 2XBD[A].

## 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](mailto: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.

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