

## Carbohydrate Binding Module 27A, *Thermotoga maritima*

### (GFP-CBM27)

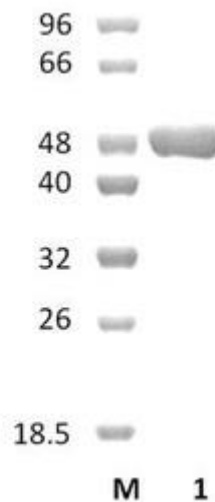
Catalogue number	Presentation
CZ01771	0.5 mg
CZ01772	3 x 0.5 mg

#### Description

Carbohydrate Binding Module 27A (GFP-CBM27) is a Carbohydrate Binding Protein originating from *Thermotoga maritima*. The recombinant GFP-CBM27, purified from *Escherichia coli*, is a modular protein belonging to the Carbohydrate Binding Module family 27 (CBM27, 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 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 GFP-CBM27 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-CBM27 was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 49,49 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-CBM27 binds to 1,4-β-mannans. The biochemical properties of GFP-CBM27 are detailed in the referenced publication(s) provided below.

## Assay conditions

For optimal recovery of GFP-CBM27 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

Boraston *et al.* (2003) *Structure*. 11(6):665-75.

PDB/3D code: 1OF3, 1OF4, 1OH4.

## 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  $\geq 75\%$ , 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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