

CZ1047\_UG\_EN\_V2302

## Carbohydrate Binding Module 48A, Rhizobium sp.

# (GFP-CBM48)

Catalogue number Presentation

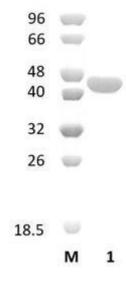
CZ10471 1 mg CZ10472 3 x 1 mg

#### **Description**

Carbohydrate Binding Module 48A (GFP-CBM48) is a Carbohydrate Binding Protein originating from *Rhizobium sp.*. The recombinant GFP-CBM48, purified from *Escherichia coli*, is a modular protein belonging to the Carbohydrate Binding Module family 48 (CBM48, see more details at <a href="https://www.cazy.org">www.cazy.org</a>) 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-CBM48 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-CBM48 was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 41,55 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-CBM48 binds to glycogen.

#### **Assay conditions**

For optimal recovery of GFP-CBM48 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 CaCl2. Following resuspension, proceed to the appropriate assay as dictated by your experimental requirements.

#### **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 ≥75%, as assessed by SDS-PAGE and subsequent BlueSafe staining (MB15201).

For life science research only. Not for use in diagnostic procedures.