

CZ0740 UG EN V2302

# Ulvan lyase 24A, Pseudoalteromonas sp.

# **PUIv24A (PL24)**

Catalogue number Presentation

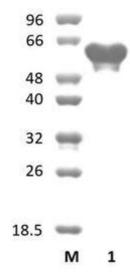
CZ07401 1 mg CZ07402 3 x 1 mg

#### Description

Ulvan lyase 24A (*PUlv24A*), assigned the E.C. number 4.2.2.-, is a derivative of *Pseudoalteromonas sp.*. It is an enzyme that cleaves the bond between 3-sulfated rhamnose (Rha3S) linked to either D-glucuronic acid (GlcA) or L-iduronic acid (IduA) in the marine polysaccharide ulvan. The recombinant *PUlv24A*, purified from *Escherichia coli*, is a single-domain Pectate Lyase family 24 (PL24) enzyme (see more details at <a href="https://www.cazy.org">www.cazy.org</a>). 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 25% (v/v) glycerol, 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 *PUIv24A* (PL24) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).



**Figure 1**. SDS-PAGE analysis of *PUIv24A* (PL24) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 59,41 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.

#### **Substrate specificity**

PUlv24A (PL24) participates in the eliminative cleavage of ulvan.

### Temperature and pH optima

The pH optimum for enzymatic activity is 8 while temperature optimum is 50 °C.

# **Enzyme activity**

The substrate specificity and kinetic properties of *P*UIv24A (PL24) are detailed in the referenced publication provided below. To perform enzyme assays and determine specific activity values, adhere to the methodology outlined in the cited paper(s).

#### Reference

Kopel et al. (2016) J Biol Chem. 291(11):5871-8.

# **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).

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