CZ1072_UG_EN_V2302

Ulvan lyase 25A, *Algibacter pectinivorans*

*Ap*Ulv25A (PL25)

Catalogue number	Presentation
CZ10721	1 mg
CZ10722	3 x 1 mg

Description

Ulvan lyase 25A (*Ap*Ulv25A), assigned the E.C. number 4.2.2.-, is a derivative of *Algibacter pectinivorans*. 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 *Ap*Ulv25A, purified from *Escherichia coli*, is a single-domain Pectate Lyase family 25 (PL25) enzyme (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 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 *Ap*Ulv25A (PL25) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).

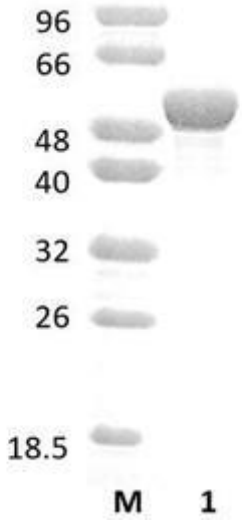

Figure 1. SDS-PAGE analysis of *Ap*Ulv25A (PL25) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 52,11 kDa. Lane M contains a Protein Marker for reference.

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

*Ap*Ulv25A (PL25) participates in the eliminative cleavage of ulvan.

Temperature and pH optima

The enzyme exhibits optimal activity within a pH range of 6.5-7.5 and at a temperature of 37°C. Maximal enzymatic activity is achieved at pH 7 and a consistent temperature of 37°C.

Enzyme activity

The substrate specificity and kinetic properties of *Ap*Ulv25A (PL25) 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).

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).