CZ0960_UG_EN_V2302

# Cellobiose dehydrogenase, *Podospora anserina*

# *Pa*CDH (CDH)

| Catalogue number | Presentation |
|---|---|
| CZ09601 | 0.25 mg |
| CZ09602 | 3 x 0.25 mg |

## Description

Cellobiose dehydrogenase (*Pa*CDH), assigned the E.C. number 1.1.99.18, is a derivative of *Podospora anserina*. It is an enzyme that catalyzes oxidation of cellobiose into cellobiono-1,5-lactone. The recombinant *Pa*CDH, purified from *Pichia Pastoris*, is a single-domain Cellobiose dehydrogenase family 0 (CDH) 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 0.25 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 *Pa*CDH (CDH) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).

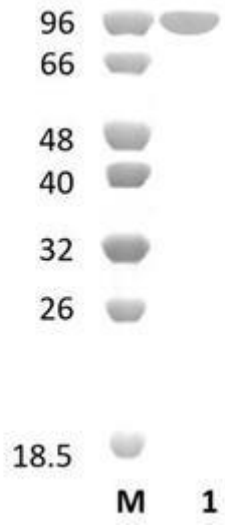


**Figure 1**. SDS-PAGE analysis of *Pa*CDH (CDH) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 96 kDa. Lane M contains a Protein Marker for reference.

## 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

*Pa*CDH (CDH) hydrolyses cellobiose.

## Temperature and pH optima

The pH optimum for enzymatic activity is 5 while temperature optimum is 30 °C.

## Enzyme activity

The substrate specificity and kinetic properties of *Pa*CDH (CDH) 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

Bennati-Granier *et al*. (2015) Biotechnol Biofuels. 8:90.

## 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).