

CZ0796\_UG\_EN\_V2302

# Sulfoquinovosidase 31A, Escherichia coli

# EcSqa31A (GH31)

Catalogue number Presentation

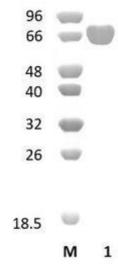
CZ07961 1 mg CZ07962 3 x 1 mg

#### **Description**

Sulfoquinovosidase 31A (*Ec*Sqa31A), assigned the E.C. number 3.2.1.199, is a derivative of *Escherichia coli*. It is an enzyme that removes sulfoquinovose (SQ) from the plant glycolipid sulfoquinovosyl diacylglyceride (SQDG). The recombinant *Ec*Sqa31A, purified from *Escherichia coli*, is a single-domain Glycoside Hydrolase family 31 (GH31) 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 *EcS*qa31A (GH31) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).



**Figure 1**. SDS-PAGE analysis of *Ec*Sqa31A (GH31) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 79,37 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**

EcSqa31A (GH31) hydrolyses sulfoquinovosyl diacylglyceride (SQDG).

#### Temperature and pH optima

The pH optimum for enzymatic activity is 7 while temperature optimum is 37 °C.

## **Enzyme activity**

The substrate specificity and kinetic properties of *EcS*qa31A (GH31) 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

Speciale et al. (2016) Nature Chemical Biology. 12:215-217.

Okuyama et al. (2004) Protein Expr Purif. 37(1):170-9.

## **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.