

## Chondroitin AC lyase 8A, *Bacteroides stercoris*

### BsCac8A (PL8)

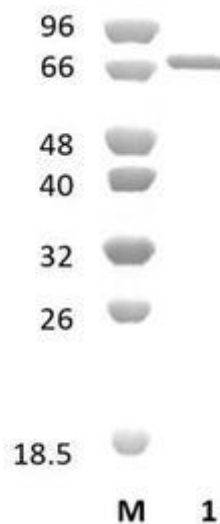
Catalogue number	Presentation
CZ09351	0.25 mg
CZ09352	3 x 0.25 mg

#### Description

Chondroitin AC lyase 8A (*BsCac8A*), assigned the E.C. number 4.2.2.5, is a derivative of *Bacteroides stercoris*. It is an enzyme that participates in the eliminative degradation of polysaccharides containing 1,4- $\beta$ -D-hexosaminy and 1,3- $\beta$ -D-glucuronosyl linkages to disaccharides containing 4-deoxy- $\beta$ -D-gluc-4-enuronosyl groupsanhydrobond in the MurNAc residue. The recombinant *BsCac8A*, purified from *Escherichia coli*, is a single-domain Pectate Lyase family 8 (PL8) enzyme (see more details at [www.cazy.org](http://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<sub>2</sub>, 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 *BsCac8A* (PL8) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).



**Figure 1.** SDS-PAGE analysis of *BsCac8A* (PL8) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 77,11 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

*BsCac8A* (PL8) participates in the eliminative cleavage of chondroitin sulfates A and C and hyaluronic acid.

#### Temperature and pH optima

The enzyme exhibits optimal activity within a pH range of 5.5-6.5 and at a temperature of 45°C. Maximal enzymatic activity is achieved at pH 5.8 and a consistent temperature of 45°C.

## Enzyme activity

The substrate specificity and kinetic properties of *BsCac8A* (PL8) 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

Shim and Kim. (2008) *Protein Expr Purif.* 58(2):222-8.

## 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](mailto:info@nzytech.com).

## Quality control assay

Protein purity is determined to be  $\geq 90\%$ , as assessed by SDS-PAGE and subsequent BlueSafe staining (MB15201).

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

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