Xylosidase 43A, *Bifidobacterium adolescentis*

**BaXyl43A (GH43)**

### Catalogue number

<table>
<thead>
<tr>
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<th>Presentation</th>
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<tr>
<td>CZ03891</td>
<td>1 mg</td>
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<tr>
<td>CZ03892</td>
<td>3 x 1 mg</td>
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### Description

Xylosidase 43A (BoXyl43A), assigned the E.C. number 3.2.1.37, is a derivative of *Bifidobacterium adolescentis*. It is an exo-1,4-β-xylosidase. The recombinant BoXyl43A, purified from *Escherichia coli*, is a single-domain Glycoside Hydrolase family 43 (GH43) 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$_2$, 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 *BaXyl43A* (GH43) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).

![Figure 1](image)

**Figure 1.** SDS-PAGE analysis of *BaXyl43A* (GH43) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 41,10 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

*BaXyl43A* (GH43) hydrolyses β-xylooligosaccharides and p-nitrophenyl-β-D-xylopyranoside.

### Temperature and pH optima

The pH optimum for enzymatic activity is 6 while temperature optimum is 55 °C.
Enzyme activity
The substrate specificity and kinetic properties of BoXyl43A (GH43) 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

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).