



Endo F2 (Endoglycosidase F2) Endo-beta-N-acetylglucosaminidase F2

Source

recombinant gene from *Elizabethkingia miricola* in *E. Coli*

Catalog Number E-EF02

E-EF0260 μlE-EF02-2020 μlE-EF02-200200 μl

EC 3.2.1.96

Recommended Reagents

included with E-EF02: 1 vial: 5x Reaction Buffer - 400 μl 250 mM sodium acetate, pH4.5

Activity \geq 5 U/ml Specific Activity \geq 20 U/mg

Molecular Weight 32 kD

Specific Activity

Defined as the amount of enzyme required to catalyze the release of N-linked oligosaccharides from 1 micromole of denatured porcine fibrinogen in 1 minute at 37°C, pH 5.5. Cleavage is monitored by SDS-PAGE (cleaved fibrinogen migrates faster).

Formulation

The enzyme is provided as a sterile-filtered solution in 10 mM sodium acetate, 25mM NaCl, pH 4.5

Storage Store enzyme at 4°C. Do not freeze.

Specificity

QA-BioTM Endo F2 cleaves Asparagine-linked biantennary and high mannose glycans (at a 40X reduced rate). It cleaves between the two N-acetylglucosamine residues in the diacetylchitobiose core of the oligosaccharide, generating a truncated sugar molecule with one N-acetylglucosamine residue remaining on the asparagine. In contrast, PNGase F removes the oligosaccharide intact.

Endoglycosidase F2 is less sensitive to protein conformation than PNGase F and is therefore more suitable for deglycosylation of native proteins. However for optimal results, denaturation of the glycoprotein is recommended.

Quality & Purity

QA-Bio Endo F2 is tested for contaminating protease as follows: 10 μ g of denatured BSA is incubated at 37°C for 24 hours with 2 μ l of enzyme. SDS-PAGE analysis of the treated BSA shows no evidence of degradation.

The production host strain has been extensively tested and does not produce any detectable glycosidases.

Stability

Several days exposure to ambient temperatures will not reduce activity. Stable at least 12 months when stored properly.

Endo F2

Specifications - Protocol

QA-Bio www.QA-Bio.com info@QA-Bio.com

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Directions for use

- 1. Add up to 200 μg of glycoprotein to an Eppendorf tube. Adjust to 38 μl final volume with de-ionized water.
- 2. Add 10 µl 5x Reaction Buffer 4.5
- 3. Add 2.0 μl of Endo F2 to the reaction. Incubate 1 hour at 37°C.

Monitor cleavage by SDS-PAGE.

References:

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QA-Bio E-EF02 Product Specifications - Protocol

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Trimble, R. B. and A. L. Tarentino. Identification of Distinct Endoglycosidase (Endo) Activities in *Flavobacterium meningosepticum*: Endo F1, Endo F2 and Endo F3. **J. Biol Chem 266:**1646-1651 (1991).

Warranties and Liabilities

QA-Bio warrants that the above product conforms to the specifications described herein. Should the product fail for reasons other than through misuse QA-Bio will, at its option, replace free of charge or refund the purchase price. This warranty is exclusive and QA-Bio makes no other warrants, expressed or implied, including any implied conditions or warranties of merchantability or fitness for any particular purpose. QA-Bio shall not be liable for any incidental, consequential or contingent damages.

This product is intended for *in vitro* research only.

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