Endo F3 (Endoglycosidase F3)
Endo-beta-N-acetylglucosaminidase F3

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

Catalog Number
- E-EF03  60 µl
- E-EF03-20  20 µl
- E-EF03-200  200 µl

EC 3.2.1.96

Recommended Reagents
included with E-EF03:
- 1 vial: 5x Reaction Buffer - 400 µl
- 250 mM sodium acetate, pH 4.5

Activity 5 U/ml
Specific Activity ≥ 25 U/mg

Molecular Weight 30 kD

Specific Activity
Defined as the amount of enzyme required to catalyze the release of N-linked oligosaccharides from 1 micro-mole of porcine fibrinogen in 1 minute at 37°C, pH 4.5. Cleavage is monitored by SDS-PAGE.

Formulation
The enzyme is provided as a sterile-filtered solution in 20 mM Tris-HCl, pH 7.5

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

Specificity
QA-Bio™ Endo F3 cleaves free or Asparagine-linked triantennary or fucosylated biantennary oligosaccharides, as well as triamniosyl chitobiose core structures.

It cleaves between the two N-acetylglucosamine residues in the diacetylichitobiose 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. Alpha 1-3 fucosylation will inhibit enzymatic activity.

The recombinant version is not glycosylated, which may result in properties differing from the native protein.

Quality & Purity
QA-Bio Endo F3 is tested for contaminating protease as follows: 10 µg of denatured BSA is incubated at 37°C for 24 hours with 2 µl 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.
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 F3 to the reaction. Incubate 1 hour at 37°C.

Monitor cleavage by SDS-PAGE.

References:


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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