Ver. HB240813

Endo H

Product description

Endo H is a recombinant glycosidase， cloned from the corrugated Streptomyces plicatus, which is capable of cleaving the chitobiose core structure of high mannose and certain hybrid oligosaccharides in N-glycoproteins, thereby removing the N-linked high mannose from glycoproteins.

Yeasen Endo H is recombinantly expressed in yeast, and the storage buffer is free of glycerol, which helps to achieve optimal results in HPLC and mass spectrometry analysis. This product is tagged with His and is commonly used for complete deglycosylation of antibodies and related proteins.

Additionally, Yeasen also provides other types of glycosidases, such as Endo S (Cat#20413ES), and PNGase F (Cat#20407ES, Activity: 100000 U/mL).

Components

Components No.	Name	20414ES92	20414ES97
20414-A	Endo H	10000 U	50000 U
20414-B1	Buffer 1(10×)	100 μL	500 μL
20414-B2	Buffer 2(10×)	200 μL	1000 μL

Properties

English synonym	Endo H
Source	Yeast recombinant expression
Molecular weight*	Theoretical value 29 kDa
Storage Buffer	20 mM Tris，50 mM NaCl，5 mM EDTA PH7.5
Activity	1,000,000 U/mL
Unit Definition	One unit of endoglycosidase H is defined as the amount of enzyme required to hydrolyze >95% of the oligomannose from 10 μg of denatured RNase B in 1 hour at 37°C in a 10 μL reaction volume.

*Due to the influence of the eukaryotic expression in Pichia pastoris, the molecular weight of the target protein, as shown by SDS-PAGE (non-boiled), is approximately 60 kDa, while the molecular weight of the target protein, as shown by SDS-PAGE (boiled), is approximately 29 kDa.

Storage

The product can be stored at -25~-15°C for one year.

Instructions

1. Protein deglycosylation under denaturing conditions:

1) Add 1 μL of Buffer 1 and the target glycoprotein (1-20 μg) to water, to a final volume of 10 μL;

2) Boil at 100°C for 10 minutes to denature, cool on ice, and centrifuge for 10 seconds;

3) Add 2 μL of Buffer 2 and 8 μL of deionized water, for a total reaction volume of 20 μL;

4) Add 1-2 μL of Endo H, gently mix. Incubate at 37°C for 1-3 hours.

5) Heat inactivate at 75°C for 10 minutes.

2. Protein deglycosylation under non-denaturing conditions:

1) Add 2 μL of Buffer 2 and the target glycoprotein (1-20 μg) to water, to a final volume of 20 μL.

2) Add 2-5 μL of Endo H, gently mix.

3) Incubate at 37°C for 4-24 hours.

Note: Most substrates deglycosylate better under denaturing conditions, and an increase in the amount of Endo H and an extension of the incubation time may be required under non-denaturing conditions.

Notes

1. Please wear the necessary PPE, such lab coat and gloves, to ensure your health and safety!

2. For research use only!