

Endo S2, Streptococcus pyogenes

Cat. No. ESGZ-0001

Lot. No. (See product label)

Introduction

Description

Endo S2 is a highly specific endoglycosidase that cleaves the glycosidic bond between the two innermost N-acetylglucosamine residues of IgG N-linked glycans.

Applications

IgG deglycosylation, antibody N-glycan analysis, glycoprotein characterization, and antibody glycan modification workflows.

Synonyms

Endo S2; Endoglycosidase S2; IgG-Specific Endoglycosidase S2

Product Information

Species

Streptococcus pyogenes (gene source)

Source

Recombinant Escherichia coli expression

Form

Liquid enzyme preparation supplied with 10× buffer

Purity

>95% by SDS-PAGE

Activity

50 U/μL

Specific Activity

50 U/μL

Specificity

Efficiently hydrolyzes high-mannose, hybrid, and biantennary complex-type N-linked glycans on IgG by cleaving between the two innermost N-acetylglucosamine residues.

Buffer

20 mM Tris, 100 mM NaCl, pH 7.5

Function

Removes N-linked glycans from IgG through endoglycosidic cleavage of the chitobiose core.

Substrates

IgG N-linked glycans; native mouse IgG is used for activity determination.

Quality

Purity >95% by SDS-PAGE; no detectable exoglycosidase contamination; no proteolytic activity.

Unit Definition

One unit is the amount of enzyme required to remove more than 95% of the carbohydrate from 5 μg of native mouse IgG in a 10 μL reaction at 37°C for 1 hour.

Reaction

Hydrolysis of the glycosidic bond between the two innermost N-acetylglucosamine residues of IgG N-linked glycans.

Notes

The His tag facilitates removal of the enzyme after the reaction.

Components

Endo S2 (50 U/μL) 10× Buffer

Usage

For IgG deglycosylation and antibody N-glycan characterization.

Usage and Packaging

Package

Option 1: Endo S2, 1,000 U; 10× Buffer, 1 mL Option 2: Endo S2, 5 × 1,000 U; 10× Buffer, 5 × 1 mL

Storage and Shipping Information

Storage

Store at -25°C to -15°C. Shelf life: 1 year.