

## PRODUCT INFORMATION

Endo S, recombinant (lyophilized)

Cat. no. 36408

## PRODUCT DESCRIPTION

Endo S, a recombinant endo- $\beta$ -N-acetylglucosaminidase S from *Streptococcus pyogenes* has a unique accuracy for cleaving the N-linked glycans from the chitobiose core of the heavy chain of native IgG molecules. The enzyme hydrolyzes the  $\beta$ (1-4) linkage between the two core GlcNAcs of asparagine linked biantennary complex-type glycans of human IgG Fc regions. The enzyme will leave any human IgG with a single N-acetylglucosamine, with or without an attached fucose molecule.

- Especially designed and tested for mass spectrometry imaging and HPLC/UPLC
- Contains a His-tag for easy removal by affinity chromatography
- No need for refrigerated transport, storage at room temperature

**Concentration after reconstitution with H<sub>2</sub>O dist.:** 200 units/ $\mu$ l (1  $\mu$ g/ $\mu$ l)

**Molecular Weight:** approx. 108 kDa

**Storage of the lyophilizate:** + 15 °C to + 30 °C

**Storage after reconstitution:** + 4 °C for 1 month, - 20 °C to - 80 °C for long-term storage (avoid multiple freeze-thaw cycles).

## PROTOCOL

The following protocol is intended as a general guide for IgG deglycosylation and may require modification for different antibody substrates. Like many enzyme reactions, it is highly dependent on reaction conditions and should be determined empirically for each target.

### Required Materials:

- Double dist. or other mass spectrometry grade water

**Supplied 10X Endo S Reaction Buffer:** 50 mM CaCl<sub>2</sub>, 500 mM sodium acetate, pH 5.5

- Add up to 100  $\mu$ g of the target IgG in water (or a compatible buffer at a low ionic strength) to a final volume of 17  $\mu$ l.
- Add 2  $\mu$ l of the 10x Endo S Reaction Buffer.
- Add 1  $\mu$ l of reconstituted Endo S
- Incubate at 37 °C for 30 - 60 minutes.

Deglycosylation may be visualized by gel-shift on SDS PAGE.