

KRISHZYME™

beta-N-Acetylglucosaminidase S (β -N-Acetylglucosaminidase S)

REF : KPGF-009

Ver 2.0

RIUO

RIUO	For Research & Industrial Use Only	REF	Catalog Number
	Store At	LOT	Batch Code
	Manufactured By		Biological Risk
	Expiry Date		Consult Operating Instructions

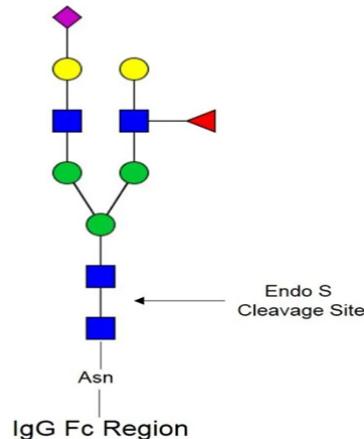
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Product Description:

Endo-β-N-acetylglucosaminidase S (Endo S) cleaves the hydrolysis of the $\beta(1-4)$ linkage between the two core GlcNAcs of asparagine linked biantennary complex-type glycans of IgG Fc regions. This endoglycosidase only deglycosylates IgG glycoforms and plays a central role in glycoengineering strategies for the development of IgG antibodies with improved therapeutic efficacy.

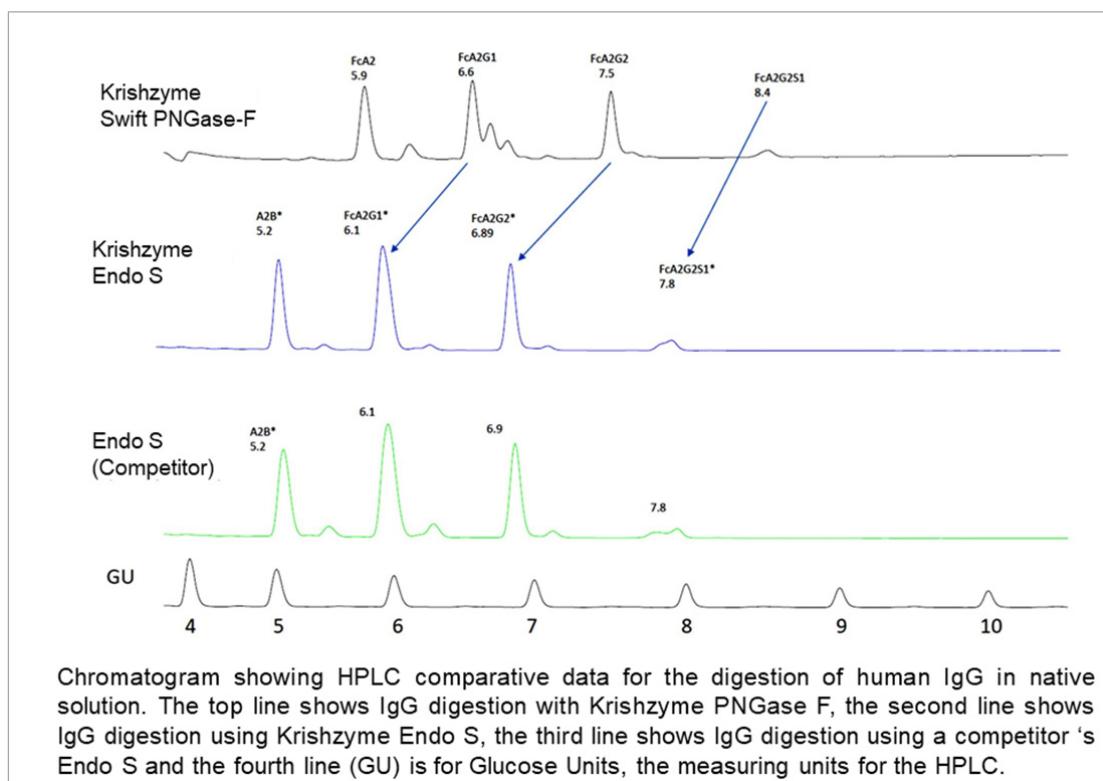


Krishzyme Endo S comes in a lyophilized format that is perfectly suitable for use in solution-based analyses. The target core for Krishzyme Endo S is IgG Asparagine-linked (N-linked) oligosaccharides (complex).

Like other KRISHZYME Glycosidases, Krishzyme Endo S is lyophilized for stability during shipment and storage. Its performance is outstanding -

- able to produce clean peaks with very high yields (as detected by HPLC),
- commonly used in drug development or other research that is highly focused on the use of human antibodies.

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Product Size:

Cat No	Pack Size	Concentration
KPGF-009	10000 U / 50 ul	200,000 U/ml
	20000 U / 100 ul	

Physical Form:

KRISHZYME™ Endo- β -Acetylglucosaminidase S is supplied in a lyophilized format at a concentration of 200,000 U/ml when reconstituted in 100 ul of dH₂O to get 20000 U / 100 ul Both native and denatured glycoproteins are compatible for cleaving.

Reagents Supplied:

The following reagents are supplied with this product:

Composition	Formula	Concentration
Assay Buffer 1	50 mM CaCl ₂ , 500 mM Sodium Acetate, pH 5.5 at 25°C	10X

Product Source:

Recombinant enzyme expressed in E.coli.

Product Quality:

$\geq 95\%$ purity, as determined by SDS-PAGE. No other exoglycosidase, endoglycosidase, and protease activity were contaminated.

Unit Definition:

One unit is defined as the amount of enzyme required to completely deglycosylate 10 ug of denatured IgG following incubation for 60 minutes at 37°C.

Storage Temperature:

Store at -20°C. Avoid multiple freeze-thaws.

Characteristic:

- Recombinant enzyme with no detectable endoglycosidase or other exoglycosidases contaminating activities
- $\geq 95\%$ purity, as determined by SDS-PAGE
- Optimal activity and stability for up to 12 months
- Glycerol-free for optimal performance in HPLC and mass spectrometry analysis

Applications:

- Structural analysis of oligosaccharides
- Glycoprotein deglycosylation
- Removing heterogeneity from glycoproteins

Suggestions for Use:

- 1) Combine 1-100 ug of glycoprotein and H₂O (if necessary) in a total reaction volume of 8 ul.
- 2) Add 1 ul of 10X Assay Buffer 1 to make a 9 ul total reaction volume.
- 3) Add 1ul Endo- β -Acetylglucosaminidase, mix gently.
- 4) Incubate at 37°C for 1 hour.

Notes :

- The amount of exoglycosidase enzyme required varies when different substrates are used. Start with 1-2 ul for 1-100 ug of glycoprotein for one hour in a 10-25 ul reaction. If there is still undigested material, let the reaction go overnight.
- The reaction can be scaled up linearly.

References:

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