






KRISHZYME™

beta-N-Acetylglucosaminidase F3 (β-N-Acetylglucosaminidase F3)

REF : KPGF-008

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

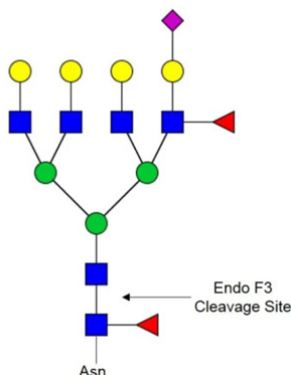
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KRISHGEN BioSystems For US/Europe Customers: toll free +1(888)-970-0827 | tel +1(562)-568-5005
For Asia/India Customers: +91(22)-49198700
Email: sales1@krishgen.com | <http://www.krishgen.biz>

Product Description:

Endo-β-N-acetylglucosaminidase F3 (Endo F3) cleaves in β(1-4) link in between the two core GlcNAcs of asparagine linked glycans. Endo F3 cleaves this link on core-fucosylated structures. Endo F3 can be applied to workflows alone or in conjunction with Krishzyme Swift PNGase F to allow for structural characterization of core-fucosylated glycans in tissues while maintaining spatial localization.



For instance, one major drawback of MALDI Imaging is the inability to differentiate core-fucosylated glycans from outer-arm fucosylated glycans. This issue is alleviated through by using Krishzyme Endo F3 due to its specificity for core-fucosylated structures.

Krishzyme Endo F3 comes in a lyophilized format that is perfectly suitable for use in solution-based analyses. The target core for Krishzyme Endo F3 is alpha-1,6 linked fucosylated Asparagine-linked (N-linked) oligosaccharides (complex).

Product Size:

Cat No	Pack Size	Concentration
KPGF-008	800 U / 50 ug	

Physical Form:

KRISHZYME™ Endo-β-Acetylglucosaminidase F3 is supplied in a lyophilized format at a concentration of 8 U/ul when reconstituted in 100 ul of dH₂O. 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:

≥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 10 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
- ≥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.

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