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KRISHZYME™ beta-N-Acetylhexosaminidase (β-N-Acetylhexosaminidase)

REF : KPGF-007

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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REF **KPGF-007**

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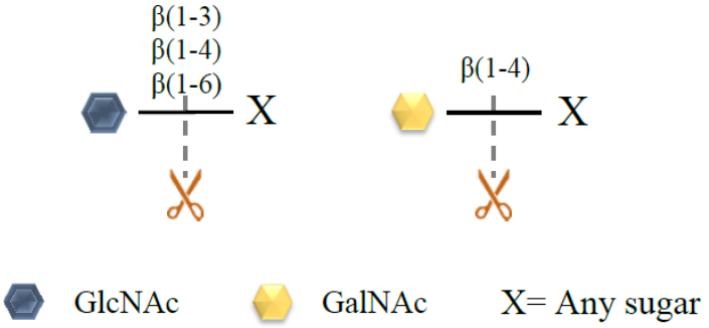
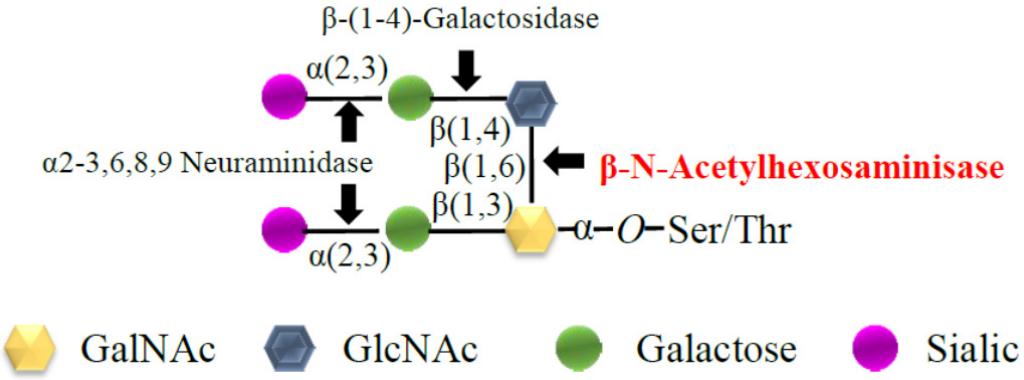
Product Description:

β-N-Acetylhexosaminidase is an exoglycosidase that catalyzes the hydrolysis of terminal, non- reducing β-N-acetyl-galactosamine and glucosamine residues from oligosaccharides.



β-N-Acetylhexosaminidase catalyzes the hydrolysis of terminal β-D-N-acetyl-galactosamine and glucosamine residues from oligosaccharides

Krishzyme™ β-N-Acetylhexosaminidase is a recombinant glycosidase cloned from Streptomyces plicatus and overexpressed in E. coli. Krishzyme™ β-N-Acetylhexosaminidase is a exoglycosidase with a molecular weight of 55 kD that can be used to remove O-GlcNAc (N- Acetylglucosaminidase on serine/threonine).



KRISHZYME™ β-N-Acetylhexosaminidase assists in the cleavage of O-linked oligosaccharides

Product Size:

Cat No	Pack Size	Concentration
KPGF-007-A	4 U / 50 ul	80 U /ml
KPGF-007-B	16 U / 200 ul	

Physical Form:

KRISHZYME™ β-N-Acetylhexosaminidase is supplied as a liquid in 20mM Tris-HCl (pH 7.5 at 25°C), 200mM NaCl, 1mM EDTA at a concentration of 80 U/ml.

Reagents Supplied:

The following reagents are supplied with this product:

Composition	Formula	Concentration
Assay Buffer 1	50 mM CaCl2, 500 mM Sodium Acetate, pH 5.5 at 25°C	10X

Product Source:

Recombinant gene cloned from Streptomyces plicatus and overexpressed 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 catalyze the release of 1 µmole of p- nitrophenol from p-nitrophenol-N-acetyl-β-D-glucosaminide per minute at 37°C, pH 5.5.

Storage Temperature:
Store at -20°C

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 24months
- Glycerol-free for optimal performance in HPLC and mass spectrometry analysis
- Can be used for Epigenetic applications to remove O-GlcNAc from serine/threonine residues on transcription factors, histones, RNA-binding proteins and other O-GlcNAc modified proteins

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 10×Assay Buffer 1 to make a 9 ul total reaction volume.
3) Add 1ul β-N-Acetylhexosaminidase, 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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