KRISHZYME™ β 1-4 Galactosidase (beta 1-4 Galactosidase)

REF : KPGF-006

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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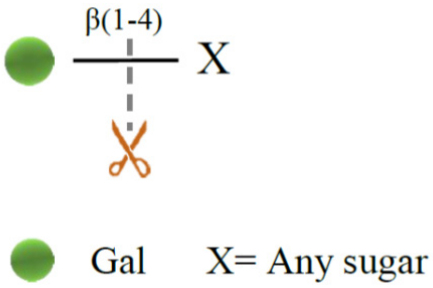
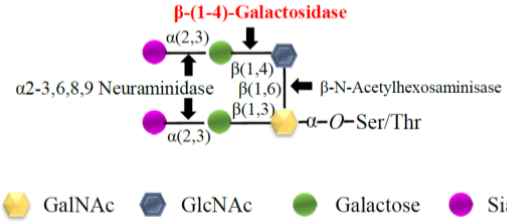
Product Description:

KRISHZYME™ β 1-4 Galactosidase is a highly specific exoglycosidase that catalyzes the hydrolysis of terminal, non-reducing β1-4 linked galactose residues from oligosaccharides, glycoproteins or oligosaccharides. This specificity is only evident at enzyme concentrations < 100mU/ml. At higher concentrations, hydrolysis of β(1-3)-linked galactose occurs.



KRISHZYME™ β1-4 Galactosidase is a highly specific exoglycosidase that catalyzes the hydrolysis of β1-4 linked galactose residues from oligosaccharides.

KRISHZYME™ β1-4Galactosidase is a recombinant glycosidase cloned from Streptococcus pneumoniae and expressed in E. coli. KRISHZYME™ β1-4Galactosidase has a molecular weight of 94kDa.



KRISHZYME™ β1-4 Galactosidase assists in the cleavage of O-linked oligosaccharides.

Product Size:

Cat No	Pack Size	Concentration
KPGF-006-A	0.03 U / 50 ul	6 U /ml
KPGF-00B-B	1.20 U / 200 ul	

Physical Form:

KRISHZYME™ β 1-4 Galactosidase (beta 1-4 Galactosidase) is supplied as a liquid in 20mM Tris-HCl (pH 7.5 at 25°C), 50mM NaCl and 1mM EDTA at a concentration of 6 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 *Flavobacterium meningsepticum* and 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 hydrolyze 1 umole oNP-β-D- galactopyranoside per min at pH 6.0 and 37℃.

Storage Temperature:
Store at -20°C, in a frost free refrigerator

Characteristic:

- Recombinant enzyme
- Stored in 50% glycerol.
- ≥95% purity, as determined by SDS-PAGE
- Optimal activity and stability for up to 12 months
- Can be used under native or denaturing conditions
- Optimized for deglycosylation of glycoproteins; leaves N-glycan core oligosaccharides intact and suitable for further 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 1 ul of β1-4 Galactosidase, 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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