



Alpha-(1-3,6)-Galactosidase

Source

Recombinant from *E. Coli* in *E. Coli*

Catalog Number

E-AG01

Certification of Analysis Lot Number

901.1D

Contents

1 vial:

Alpha-(1-3,6)-Galactosidase- 60 μ L (24 U)
in 50 mM sodium phosphate, pH 7.5

1 vial:

Reaction buffer - 400 μ L
250mM Sodium phosphate, pH 6.5

Specific Activity 30 U/mg

Activity 400 U/ml

Formulation

The enzyme is provided as a sterile-filtered solution in 50 mM sodium phosphate, pH 7.5

Specificity

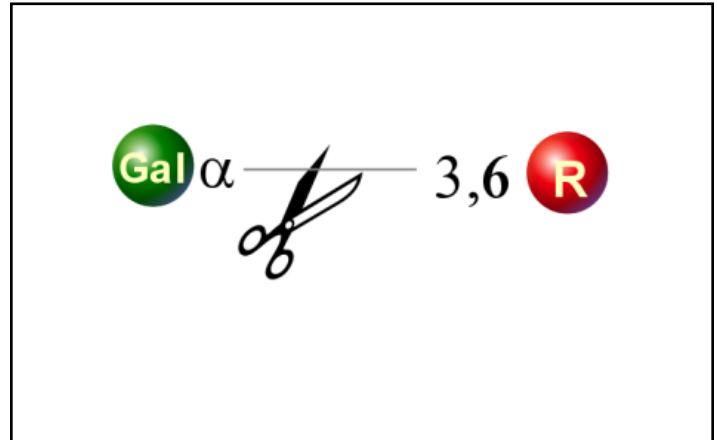
Non-reducing terminal alpha-(1-3)- and alpha-(1-6)-galactose. There is no activity on alpha-(1-4)-galactose.

Properties

molecular ~80,000 daltons

Stability

Stable at least 12 months when stored properly. Several days exposure to ambient temperatures will not reduce activity.



Storage

Store enzyme at 4°C. Do not freeze.

Applications

Structural analysis of oligosaccharides
Xenograft transplantation studies
Removing heterogeneity from glycoproteins

Specific Activity

One unit of alpha-(1-3,6) Galactosidase is defined as the amount of enzyme required to produce 1 μ mole of p-nitrophenol (pNP) in 1 minute at 25°C pH 6.5 from p-nitrophenyl-alpha-D-galactopyranoside.

Purity

Each lot of alpha-(1-3,6)-Galactosidase is tested for contaminating activities by incubating the enzyme for 24 hours with the appropriate substrates; the detection limit of these assays is 5 μ U/ml (IUB). A passing lot will have no detectable activity.

For the protease assay, 10 μ g of denatured BSA is incubated for 24 hours with 2 μ l of enzyme. Analysis of the BSA band after SDS-PAGE should show no evidence of degradation.

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Specifications - Protocol

Directions for use

1. Add up to 100 µg of asialoglycoprotein or 1 nmol of oligosaccharide to tube.
2. Add water to 14 µl and 4 µl 5X Reaction Buffer.
3. Add 2 µl alpha-(1-3,6)-Galactosidase.
4. Incubate at 37°C for 1 hour. Longer incubations are necessary if fucose is present on the penultimate sugar.

References

Kobata, A. Use of endo- and exoglycosidases for structural studies of glycoconjugates. *Anal Biochem* 100: 1-14 (1979).

Prime, S. J. Dearnley, A.M. Venton, R.B. Parekh and C.J. Edge. Oligosaccharide sequencing based on exo- and endoglycosidase digestion and liquid chromatographic analysis of the products. *J Chromatogr A* 720: 263-274 (1996)

Dwek, R.A. , C.J. Edge, D.J. Harvey, M.R. Wormald and R.B. Parekh. Analysis of glycoprotein-associated oligosaccharides. *Ann Rev Biochem* 62: 65-100.

Schmid K, Schmitt R. Raffinose metabolism in *Escherichia coli* K12. Purification and properties of a new alpha-galactosidase specified by a transmissible plasmid. *Eur J Biochem*: 67(1):95-104 (1976)

Warranties and liabilities

QA-Bio warrants that the above product conforms to the specifications described herein. Should the product fail for reasons other than through misuse QA-Bio will, at its option, replace free of charge or refund the purchase price. This warranty is exclusive and QA-Bio makes no other warranties, expressed or implied, including any implied conditions or warranties of merchantability or fitness for any particular purpose.

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