

Native Bovine $\beta(1-3,4)$ -Galactosidase

Cat. No. NATE-0973

Lot. No. (See product label)

Introduction

Description

Hydrolyzes non-reducing terminal galactose $\beta(1-3)$ and $\beta(1-4)$ linkages. Can be used in conjunction with other β -galactosidases for exoglycosidase sequencing.

Applications

The enzyme has applications in the analysis of a wide variety of glycoconjugates. It is particularly useful for ensuring the complete removal of $\beta(1-3)$ and $\beta(1-4)$ -linked non-reducing terminal galactose residues of oligosaccharides. Gal $\beta(1-6)$ GlcNAc is hydrolyzed more slowly, however this linkage is not normally encountered in native complex glycans. This activity towards $\beta(1-3)$ and $\beta(1-4)$ -linked galactose contrasts with that of our other β -galactosidases which exhibit a preference for Gal $\beta(1-4)$, and cleave the Gal $\beta(1-3)$ linkage relatively slowly, if at all. Used in conjunction, these enzymes provide a powerful means to determine linkage positions of non-reducing β galactose residues.

Synonyms

β -galactosidase; beta-gal; β -gal; lactase; β -lactosidase; maxilact; hydrolact; β -D-lactosidase; lactozym; trilactase; β -D-galactanase; oryzatym; sumiklat; β -D-galactoside galactohydrolase

Product Information

Species

Bovine

Source

Bovine testis

Form

20 mM sodium Citrate phosphate, 150 mM NaCl (pH 4.0)

Molecular Weight

~68 kD

Optimum pH

4

Buffer

5X concentrated buffer which when diluted gives 100 mM sodium Citrate/phosphate pH 4.0.

Unit Definition

One unit is defined as the amount of enzyme required to hydrolyze 1 μ mole of pNP- β -D-galactopyranoside per minute at pH 4.0 and 37°C.