

β-Mannosidase 1A from Pyrococcus furiosus, Recombinant

Cat. No. NATE-1470

Lot. No. (See product label)

Introduction

Description

Beta-mannosidase is an enzyme with system name beta-D-mannoside mannohydrolase. This enzyme catalyses the following chemical reaction: Hydrolysis of terminal, non-reducing beta-D-mannose residues in beta-D-mannosides. This gene encodes a member of the glycosyl hydrolase 2 family. The encoded protein localizes to the lysosome where it is the final exoglycosidase in the pathway for N-linked glycoprotein oligosaccharide catabolism. Mutations in this gene are associated with beta-mannosidosis, a lysosomal storage disease that has a wide spectrum of neurological involvement.

Synonyms

β-mannosidase; mannanase; mannase; β-D-mannosidase; β-mannoside mannohydrolase; exo-β-D-mannanase; EC 3.2.1.25; 9025-43-8

Product Information

Species

Pyrococcus furiosus

Source

E. coli

Form

35 mM NaHepes buffer, pH 7.5, 750 mM NaCl, 200 mM imidazol, 3.5 mM CaCl₂, 0.02% sodium azide and 25% (v/v) glycerol

EC Number

EC 3.2.1.25

CAS No.

37288-54-3

Molecular Weight

61.1 kDa

Purity

>90% by SDS-PAGE

Concentration

0.25 mg/mL

Optimum pH

7

Optimum temperature

95 °C

Specificity

p-nitrophenyl-β-D-mannopyranoside (ManpbNp), p-nitrophenyl-α-glucopyranoside (GlcpbNp)

Storage and Shipping Information

Storage

This enzyme is shipped at room temperature but should be stored at -20 °C.