**α1-6 Mannosidase**

800 units 40,000 U/ml Lot: 0031405
RECOMBINANT Store at 4°C Exp: 5/15

Description: α1-6 Mannosidase is a highly specific exoglycosidase that removes unbranched α1-6 linked α-mannopyranosyl residues from oligosaccharides (1,2). When used in conjunction with α1-2,3 Mannosidase, the α1-6 Mannosidase will cleave α1-6 Mannose residues from branched carbohydrate substrates.

Note: Concentration and Specificity Changes

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### Detailed Specificity

#### A. 0.1 nm/pl substrate, 4 hour incubation

\[
\text{Man} \alpha 1 \rightarrow 6 R
\]

#### B. 0.1 nm/pl substrate, 4 hour incubation

\[
\text{Man} \alpha 1 \rightarrow 6 \text{Man}
\]

#### C. 0.1 nm/pl substrate, 18 hour incubation

\[
\text{Man} \alpha 1 \rightarrow 6 \text{Man}
\]

#### D. 0.05 nm/pl substrate, 18 hour incubation

\[
\text{Man} \alpha 1 \rightarrow 6 \text{Man}
\]

#### E. 0.045 nm/pl substrate, 18 hour incubation

\[
\text{Man} \alpha 1 \rightarrow 6 \text{Man}
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Quality Controls

Glycosidase Assays: 80 units of α1-1,6 Mannosidase were incubated with 0.1 mM of fluorescently-labeled oligosaccharides and glycopeptides, in a 10 µl reaction for 20 hours at 37°C. The reaction products were analyzed by TLC for digestion of substrate.

β-1-N-Acetylglucosaminidase:
GlcNAcβ1-4GlcNAcβ1-4GlcNac-AMC ND

α-1-N-Acetylgalactosaminidase:
Galicα1-3(Fucα1-2)Galβ1-4Glc-AMC ND

α-Fucosidase:
Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4Glc-AMC ND

α-Galactosidase:
Galα1-3Galβ1-4Glc-AMC ND

β-Galactosidase:
Galβ1-3GlcNAcβ1-4Galβ1-4Glc-AMC ND

α-Neuraminidase:
Neu5Acc2-3Galβ1-3GlcNAcβ1-3 Galβ1-4Glc-AMC ND

α-Mannosidase:
Manα1-2Manβ1-4GlcNac-AMC ND

β-Glucosidase:
Glcβ1-4Glcβ1-4Glc-AMC ND

α-Mannosidase:
Manα1-2Manβ1-4GlcNac-AMC ND

β-Glucosidase:
Glcβ1-4Glcβ1-4Glc-AMC ND

α-Mannosidase:
Manα1-2Manβ1-4GlcNac-AMC ND

β-Glucosidase:
Glcβ1-4Glcβ1-4Glc-AMC ND

α-Mannosidase:
Manα1-2Manβ1-4GlcNac-AMC ND

β-Xylosidase:
Xylβ1-4Xylβ1-4Xylβ1-4Xyl-AMC ND

References:

U.S. Patent No. 7,094,563