Mannosidase

**α1-6 Mannosidase**

Description: α1-6 Mannosidase is a highly specific exoglycosidase that removes unbranched α1-6 linked α-D-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.

**P0727S**

800 units 40,000 U/ml Lot: 0091508 RECOMBINANT Store at 4°C Exp: 8/16

**Description:** α1-6 Mannosidase is a highly specific exoglycosidase that removes unbranched α1-6 linked α-D-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.

New Reaction Buffer

**α1-6 Mannosidase**

Description: α1-6 Mannosidase is a highly specific exoglycosidase that removes unbranched α1-6 linked α-D-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.

**P0727S**

800 units 40,000 U/ml Lot: 0091508 RECOMBINANT Store at 4°C Exp: 8/16

**Description:** α1-6 Mannosidase is a highly specific exoglycosidase that removes unbranched α1-6 linked α-D-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.

New Reaction Buffer

**α1-6 Mannosidase**

Description: α1-6 Mannosidase is a highly specific exoglycosidase that removes unbranched α1-6 linked α-D-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.

**P0727S**

800 units 40,000 U/ml Lot: 0091508 RECOMBINANT Store at 4°C Exp: 8/16

**Description:** α1-6 Mannosidase is a highly specific exoglycosidase that removes unbranched α1-6 linked α-D-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.
### Glycosidase Assays: α-1-6 Mannosidase

**Glycoprotein:**
- Fluoresceinated fetuin triantennary. ND
- Dansylated fibrinogen biantennary. ND
- Fluoresceinated fetuin biantennary. ND
- Dansylated invertase high mannose. ND
- Dansylated fibrinogen pentamannose. ND

**Glycan:**
- 1-3GalNAc
- 1-4GlcNAc
- 1-3Gal
- 1-4GlcpNAc
- 1-3Gal
- 1-4GlcNAc
- 1-3(Fucα1-2)Gal
- 1-4GlcNAc
- 1-3Man
- 1-4GlcNAc

**Unit Definition Assay:**
- 80 units of α-1-6 Mannosidase with 0.2 nmol of a standard mixture of proteins for 20 hours at 37°C, no proteolytic activity could be detected by SDS-PAGE.

**Quality Assurances:**
- No contaminating exoglycosidase or proteolytic activity could be detected (ND).

**Quality Controls:**
- Protease Assay: After incubation of 560 units of α-1-6 Mannosidase with 0.2 nmol of a standard mixture of proteins for 20 hours at 37°C, no proteolytic activity could be detected by SDS-PAGE.

**References:**

**Specific Activity:** ~137,000 units/mg

**Molecular Weight:** 51,000 daltons

**Unit Definition Assay:** Two fold dilutions of α-1-6 Mannosidase are incubated with 1 nmol AMC-labeled substrate in 1X GlycoBuffer 1, supplemented with 100 µg/ml BSA, in a 10 µl reaction. The reaction mix is incubated for 1 hour at 37°C. Separation of reaction products are visualized via thin layer chromatography (1).

**Quality Assurance:** No contaminating exoglycosidase or proteolytic activity could be detected (ND).

**Quality Controls:**
- Protease Assay: After incubation of 560 units of α-1-6 Mannosidase with 0.2 nmol of a standard mixture of proteins for 20 hours at 37°C, no proteolytic activity could be detected by SDS-PAGE.

<table>
<thead>
<tr>
<th>Enzyme</th>
<th>Specific Activity</th>
<th>Molecular Weight</th>
<th>Assay Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>β-1,6-N-Acetlylglicosaminidase</td>
<td>GlcNAcβ1-4GlcNAcβ1-4GlcNAc-AMC</td>
<td>ND</td>
<td>~137,000 units/mg</td>
</tr>
<tr>
<td>α-1,6-Acetlylglicosaminidase</td>
<td>GlcNAcα1-3(Fucα1-2)Glc</td>
<td>1-4Glc-AMC</td>
<td>ND</td>
</tr>
<tr>
<td>α-1,6-Acetlylglicosaminidase</td>
<td>GlcNAcα1-3(Fucα1-2)Glc</td>
<td>1-4Glc-AMC</td>
<td>ND</td>
</tr>
</tbody>
</table>