AMYLOGLUCOSIDASE FR (A. niger) (Lot 120701b)

1. ELECTROPHORETIC PURITY
   - Single band on isoelectric focusing (pI ~ 4.0)
   - Single major band on SDS-gel electrophoresis (MW ~ 143,500)

2. SPECIFIC ACTIVITY AND LEVELS OF OTHER ACTIVITIES

<table>
<thead>
<tr>
<th>SUBSTRATE</th>
<th>ACTIVITY (U/mg) at 40°C</th>
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</thead>
<tbody>
<tr>
<td>Amyloglucosidase (starch)</td>
<td>34.6</td>
</tr>
<tr>
<td>α-amylase (Ceralpha Reagent)</td>
<td>0.35</td>
</tr>
<tr>
<td>Cellulase (barley β-glucan)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Fructan (exo- and endo-inulinase)</td>
<td>undetectable</td>
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</tbody>
</table>

3. PHYSICOCHEMICAL PROPERTIES
   pH Optima                                    | 4.0                     |
   pH Stability                                 | 4.0-5.5                 |
   Temperature Optima                           | 70°C                    |
   Temperature Stability                        | < 60°C                  |

4. STORAGE CONDITIONS
   The enzyme is supplied as a powder and should be stored dry below -10°C.

   Recommended for use in the AOAC Fructan Method (Method 997.08).
A comparison of amyloglucosidase preparations recommended for use in AOAC Method 997.08 (Fructan).

A. ELECTROPHORETIC PURITY
- Megazyme E-AMGFR-100MG (and E-AMGFR-500MG) is a single major band on SDS-gel electrophoresis (with a very minor second band).
- Sigma AMG cat. no. A7420-25MG, Lot 047K7430V, is a single major band with several minor bands.

B. SOLUBILITY
- Megazyme E-AMGFR-100MG (and E-AMGFR-500MG) - completely soluble in water or sodium acetate buffer (100 mM, pH 4.5).
- Sigma AMG cat. no. A7420-25MG, Lot 047K7430V - only partially soluble.

C. SPECIFIC ACTIVITY
- Megazyme E-AMGFR-100MG (and E-AMGFR-500MG): 34.5 U/mg on soluble starch (pH 4.5, 40°C). 97.7 U/mg on soluble starch (pH 4.5, 55°C).
- Sigma AMG cat. no. A7420-25MG, Lot 047K7430V - 23.6 U/mg on soluble starch (pH 4.5, 40°C). 53.3 U/mg on soluble starch (pH 4.5, 55°C).