**α-AMYLASE (Aspergillus oryzae) (Lot 160501b)**

**E-ANAAM**
(EC 3.2.1.1) 4-alpha-D-glucan glucanohydrolase
CAZy Family: GH13

**PROPERTIES**

1. **ELECTROPHORETIC PURITY:**
   - Single band on isoelectric focusing (pI ~ 3.5)
   - Single band on SDS-gel electrophoresis (MW = 54,000)

2. **SPECIFIC ACTIVITY AND LEVEL OF OTHER ACTIVITIES:**

   **One Unit** of activity is defined as the amount of enzyme required, in the presence of excess thermostable α-glucosidase, to release one µmole of p-nitrophenol from BPNPG7 in one minute under the defined assay conditions, and is termed a Ceralpha Unit.

<table>
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<tr>
<th>Substrate</th>
<th>Specific Activity (U/mg Protein)</th>
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<tbody>
<tr>
<td>Ceralpha Reagent (pH 5.4, 40°C)</td>
<td>120</td>
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</table>

3. **PHYSICOCHEMICAL PROPERTIES:**
   - pH Optima: 5.0
   - pH Stability: 4.5-8.0
   - Temperature Optima: 50°C
   - Temperature Stability: < 50°C

4. **STORAGE CONDITIONS:**
The enzyme is supplied as an ammonium sulphate suspension in 0.02% sodium azide and should be stored at 4°C.

   The concentration of enzyme as supplied is 1000 CU/mL, the correct concentration for use in the Megazyme Starch Damage Method.