

α-AMYLOGLucosIDASE (*Aspergillus niger*) (Lot 90201b)

Non-recombinant

E-AMGDF-10ML

05/22

EC: 3.2.1.3

Synonyms: glucan 1,4-α-glucosidase; 4-α-D-glucan glucohydrolase; glucoamylase

CAZy Family: GH15

CAS: 9032-08-0

PROPERTIES

1. ELECTROPHORETIC PURITY:

- Single major band on isoelectric focusing (pI ~ 4.0)
- Single major band on SDS-gel electrophoresis (MW ~ 143,500)
- 3,260 U/mL (40°C, pH 4.5, soluble starch as substrate)

2. SPECIFIC ACTIVITY AND LEVEL OF OTHER ACTIVITIES:

Substrate	Activity (U/mg)
Starch (amyloglucosidase)	3260
p-Nitrophenyl β-maltoside	205
Maltose	365
Ceralpha Reagent (for the measurement of α-amylase)	108
Barley Beta-Glucan (cellulase)	< 0.05
Wheat arabinoxylan (β-xylanase)	< 0.008

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 in 50% (v/v) glycerol plus 0.02% (w/v) sodium azide, and should be stored at 4°C.

This enzyme is recommended for use in **Total Dietary Fiber** analytical procedures. The preparation is effectively devoid of cellulase and is free of catalase.