

AMYLOGLUCOSIDASE (*Aspergillus niger*)

08/23

Non-recombinant

E-AMGFR-500MG

EC: 3.2.1.3

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

CAZy Family: GH15

CAS: 9032-08-0

Refer to the product lot number Certificate of Analysis for lot specific properties.

PROPERTIES

1. ELECTROPHORETIC PURITY:

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

2. PHYSICOCHEMICAL PROPERTIES:

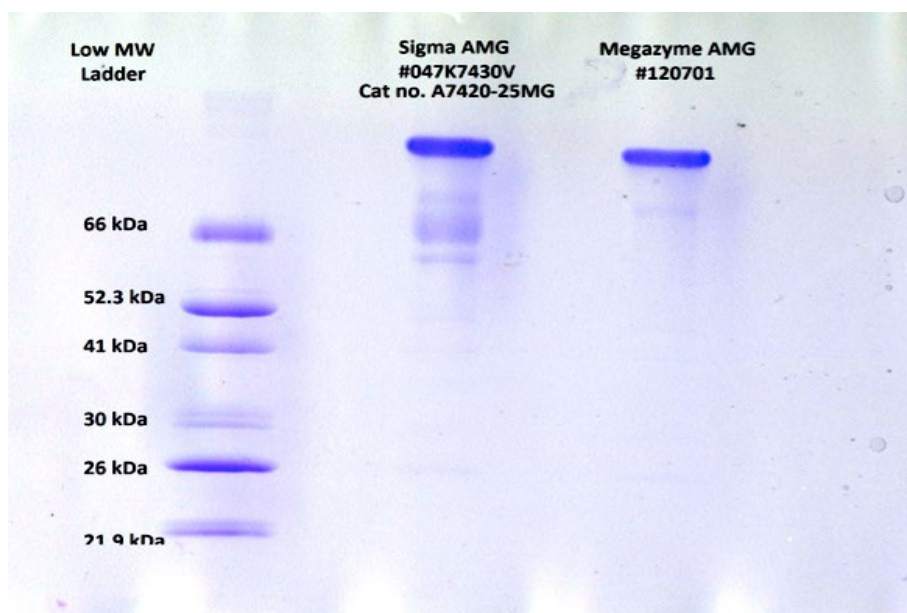
pH Optima:	4.0
pH Stability:	4.0-5.5
Temperature Optima:	70°C
Temperature Stability:	< 60°C

3. 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).

SDS Gel electrophoresis of amyloglucosidase preparations.



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).