

AMYLOGLUCOSIDASE (Aspergillus niger)

				08	/23
Non-rec	ombinant				-
F-AMG	FR-500MG				
EC: 3.2.1.3 Synonyms: glucan 1,4-alpha-glucosidase; 4-alpha-D-glucan glucohydrolase; glucoamylase					
		ase, 4-alpha-D-glucali glucoliyo	uroiase, giucoarrigia	56	
-	mily: GH15				
CAS: 903	32-08-0				
Refer to	the product lot number Cer	tificate of Analysis for lot spec	ific properties.		
PROPER	RTIES				
1.	ELECTROPHORETIC PURIT	Y:			
	- Single band on isoelectric focusing (pl \sim 4.0)				
	- Single major band on SDS-gel electrophoresis (MW ~ 143,500)				
2.	PHYSICOCHEMICAL PROP	ERTIES:			
	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	d dry below -10°C.		
Recomm	nended for use in the AOAC	Fructan Method (Method 997.	08).		
SDS Gel electrophoresis of amyloglucosidase preparations.					
	Low MW	Sigma AMG	Megazyme AMG		
	Ladder	#047K7430V Cat no. A7420-25MG	#120701		
				0	
	66 kDa				
	52.3 kDa			9	
	52.5 KDa	-			
	41 kDa				
	30 kDa			. 0	
	26 kDa	-			
	21 9 kDa				
				-	

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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).