



ISOAMYLASE from *Pseudomonas* sp. (Lot 20201)

E-ISAMY

06/03

PROPERTIES

1. ELECTROPHORETIC PURITY

- Single major band on SDS-gel electrophoresis (MW = 71,500).
- Single major band on Isoelectric focusing (pI = 5.0)

2. SPECIFIC ACTIVITY

All activities are at 40°C and pH 4.0. Glycosidase activities were measured using the appropriate *p*-nitrophenyl glycoside (at 10 mM); *endo*-glycanases were determined with the appropriate substrate (at 10mg/ml) and using the Nelson/Somogyi reducing sugar procedure. Isoamylase was assayed using oyster glycogen, and -amylase with reduced maltoheptaose.

ENZYME ACTIVITY (U/mg protein)	SUBSTRATE	ACTIVITY
Isoamylase	Oyster glycogen	105
-amylase	Reduced Maltoheptaose	< 0.001
Maltase	Maltose	< 0.001

One unit of activity is the amount of enzyme required to release one micromole of reducing sugar equivalent from the defined substrate per min at pH 4.0 and 40°C . One Unit as defined here is approximately equal to 160 Sigma Isoamylase enzyme Units. Megazyme can supply an assay format based on glycogen/iodine if required. This allows the measurement of isoamylase in the presence of ammonium sulphate.

3. PHYSICOCHEMICAL PROPERTIES

pH Optima	3.0 - 4.5
pH Stability	3.5 - 5.5 (4 hr, 40°C)
Temperature Optima	50°C
Temperature Stability	< 45°C (pH 4.0, 30 min)

4. PRODUCT DETAILS

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

This enzyme is *very unstable* to freezing and thawing.
DO NOT FREEZE !