

Glucoamylase

Glucan 1, 4- α -glucosidase

Exo-1, 4- α -D-Glucan glucohydrolase (EC 3.2.1.3)

from Rhizopus sp.

Reaction Equation



Specification

Specific Activity

IU/mg protein

Specifications
>20 units

Assay Procedure

I. Spectrophotometric Method

Wavelength ; 340 nm, Light path length ; 1 cm,
Temperature ; 37°C

Pipette the following reagents into a cuvette

- 3.00 mL α -Glycerophosphate buffer (50 mmol/L, pH 6.0)
containing NAD⁺ (1.3 mmol/L),
ATP (1.1 mmol/L),
Maltopentaose (3.3 mmol/L),
MgCl₂ (0.18 mmol/L)
- 0.01 mL HK (1,200 IU/mL)
- 0.01 mL G-6-PDH (LM) (1,200IU/mL)
- 0.02 mL Glucoamylase (about 2 IU/mL)

II. Calculation

$$\frac{\Delta A/\text{min} \cdot V \cdot D}{6.3 \cdot d \cdot v} = \text{IU/mL}$$

$\Delta A/\text{min}$ = The change in absorbance at 340 nm/minute
(revise the blank activation of Glucoamylase
(-))

V = Total volume of reaction mixture (3.04 mL)

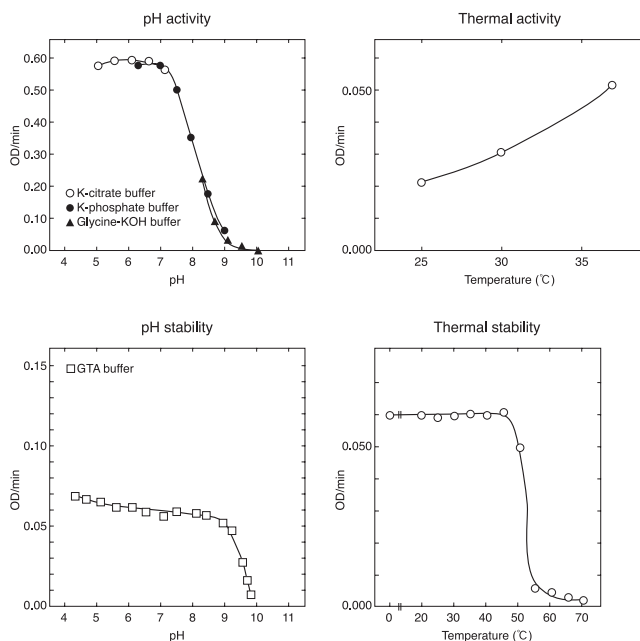
D = Enzyme dilution factor

6.3 = mM extinction coefficient of NADH
(L · mmol⁻¹ · cm⁻¹)

d = Light path length (1 cm)

v = Volume of enzyme sample (0.02 mL)

Reference Data



Preparation and storage

Product Code : Glucoamylase-00

Lyophilized powder (contains no ammonium sulfate)

.....below -20°C

IU per 1 mg powder is approximately 40 units.

OYC No./Package

OYC No.	Package
46818003	5,000 units
46819003	25,000 units
46817903	Bulk

(Research reagent use only, not for medical use.)



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