PGluM

Phosphoglucomutase

α-D-Glucose 1,6-phosphomutase (EC 5.4.2.2)

from Rabbit muscle

Reaction Equation

α-D-Glucose 1-phosphate ⇄ α-D-Glucose 6-phosphate

Specification

Specific Activity

IU/mg protein

Specifications
>20 units

Assay Procedure

Ⅰ. Spectrophotometric Method

Wavelength ; 340 nm, Light path length ; 1 cm,
Temperature ; 25℃

Pipette the following reagents into a cuvette

2.70 mL	Triethanolamine-HCl buffer(0.1 mol/L, pH 7.5)
0.15 mL	G-1-P (0.1 mol/L)
0.06 mL	G-1, 6-DP (1 mmol/L)
0.06 mL	$MgCl_2$ (0.1 mol/L)
0.03 mL	$NADP^+$ (50 mmol/L)
0.03 mL	EDTA·3Na (50 mmol/L)
0.01 mL	G6PDH (500 IU/mL)
0.02 mL	PGluM (about 1 IU/mL)

Ⅱ. Calculation

$$\frac{\Delta A/\min \cdot V \cdot D}{6.2 \cdot d \cdot v} = IU/mL$$

ΔA/min = The change in absorbance at 340 nm/minute
V = Total volume of reaction mixture (3.06 mL)
D = Enzyme dilution factor
6.2 = mM extinction coefficient of NADPH
($L \cdot mmol^{-1} \cdot cm^{-1}$)
d = Light path length (1 cm)
v = Volume of enzyme sample (0.02 mL)

Preparation and storage

Product Code : PGluM-93
Lyophilized powder (contains no ammonium sulfate)
·····below −20℃
IU per 1 mg powder is approximately 45 units.

OYC No./Package

OYC No.	Package
46550003	1,000 units
46551003	5,000 units
46550903	Bulk

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