

α -GDH

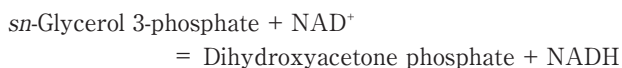
α -Glycerophosphate dehydrogenase

Glycerol-3-phosphate dehydrogenase (NAD⁺)

sn-Glycerol-3-phosphate : NAD⁺ 2-oxidoreductase (EC 1.1.1.8)

from Rabbit muscle

Reaction Equation



Specification

Specific Activity

IU/mg protein

Specifications

>120 units

Contaminants

Aldolase
Glycerol kinase
Triosephosphate isomerase
Lactate dehydrogenase

<0.005%
<0.001%
<0.1%
<0.05%

Assay Procedure

I. Spectrophotometric Method

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

Pipette the following reagents into a cuvette

3.00 mL	Triethanolamine-HCl-NaOH buffer (0.3 mol/L, pH 7.6)
0.06 mL	DAP (17.6 mmol/L)
0.05 mL	NADH (10 mg/mL) dissolved in Tris (10 mmol/L)
0.02 mL	α -GDH (about 3 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

V = Total volume of reaction mixture (3.13 mL)

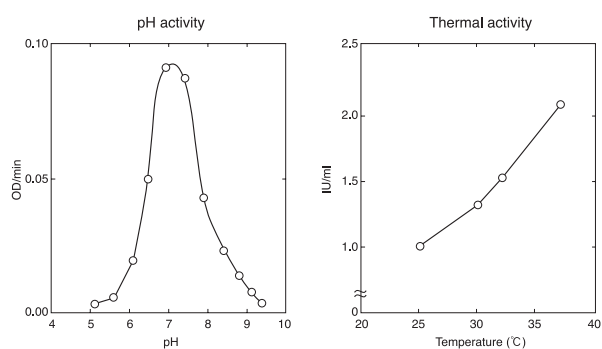
D = Enzyme dilution factor

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 : α -GDH-03

Lyophilized powder (contains no ammonium sulfate)

.....below -20°C

OYC No./Package

OYC No.	Package
46465003	1,000 units
46466003	10,000 units
46465903	Bulk

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

