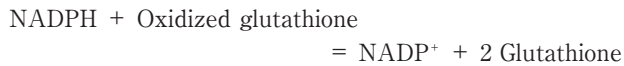


GR

Glutathione reductase (NAD(P)H)

NAD(P)H : oxidized-glutathione oxidoreductase (from Yeast)

Reaction Equation



Specification

Specific Activity

IU/mg protein

Specifications
>120 units

Contaminants

NADPH oxidase

Phosphogluconate dehydrogenase

Glucose-6-phosphate dehydrogenase

<0.01%
<0.01%
<0.1%

Assay Procedure

I. Spectrophotometric Method

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

Pipette the following reagents into a cuvette

2.75 mL Triethanolamine-HCl-NaOH buffer
(0.1 mol/L, pH 7.5)

containing EDTA·2Na (1 mmol/L)

0.15 mL GSSG (0.1 mol/L)

0.05 mL NADPH (10 mmol/L) dissolved in Tris
(10 mmol/L)

0.02mL GR (about 3 IU/mL)

II. Calculation

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

$\Delta A/\text{min}$ = The change in absorbance at 340 nm/minute

V = Total volume of reaction mixture (2.97 mL)

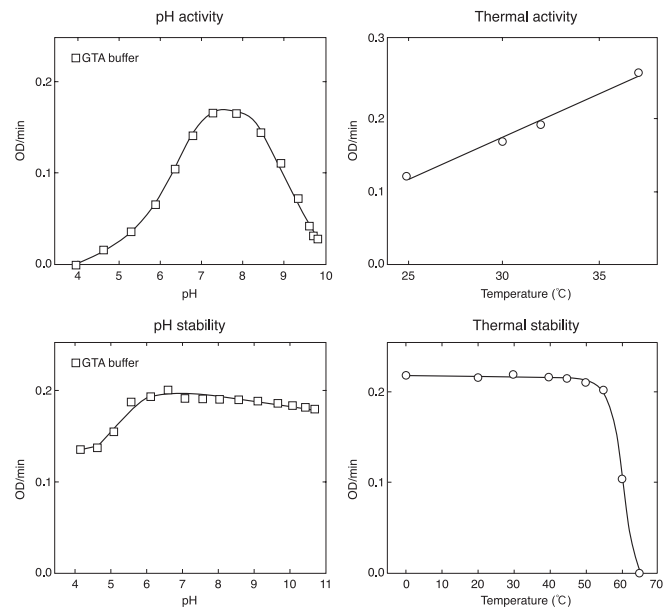
D = Enzyme dilution factor

6.2 = mM extinction coefficient of NADPH
($\text{L} \cdot \text{mmol}^{-1} \cdot \text{cm}^{-1}$)

d = Light path length (1 cm)

v = Volume of enzyme sample (0.02 mL)

Reference Data



Preparation and storage

Product Code : Y46540005

50% Glycerol solution..... - 25°C ~ - 15°C

IU per 1 ml solution is approximately 1,000 units.

SKU/Size

SKU

Y46540005.SIZE.200U 200 units

Y46541005.SIZE.1KU 1,000 units

Size