

rICDH(NADP)

recombinant Isocitrate dehydrogenase (NADP⁺) EC 1.1.1.42

from Yeast

Reaction Equation



Specification

Specific Activity

U/mg protein > 30 units

Contaminants

Isocitrate dehydrogenase (NAD⁺) < 0.5%

Assay Procedure

I Spectrophotometric Method

Wavelength : 340 nm, Light path length : 1 cm

Temperature : 25 °C

Pipette the following reagents into a cuvette

2.50 mL	Tris-HCl buffer (0.1 mol/L, pH 8.5)
0.15 mL	MgCl ₂ (0.1 mol/L)
0.05 mL	Isocitrate (0.1 mol/L)
0.15 mL	NADP ⁺ (20 mmol/L)
0.02 mL	rICDH (NADP) (approx. 3 U/mL)

II Calculation

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

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

V = Total volume of reaction mixture (2.87 mL)

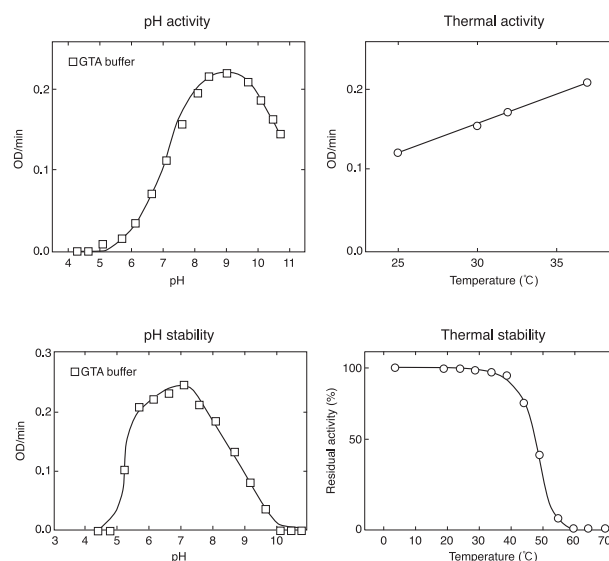
D = Enzyme dilution factor

6.2 = mmol/L extinction coefficient of NADPH
(L·mmol⁻¹·cm⁻¹)

d = Light path length (1 cm)

v = Volume of enzyme sample (0.02 mL)

Reference Data



Preparation and Storage

50% Glycerol solution

Store below -20 °C

Cat. No./Package

Cat. No.	Package
46476015	3,000 units
46720905	Bulk

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