

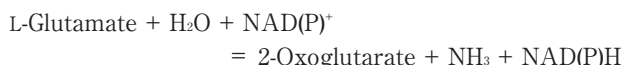
# GIDH (B.L.)

## Glutamate dehydrogenase (NAD(P)<sup>+</sup>)

L-Glutamate : NAD(P)<sup>+</sup> oxidoreductase (deaminating) (EC 1.4.1.3)

### from Beef liver

#### Reaction Equation



#### Specification

##### Specific Activity

IU/mg protein

##### Contaminants

Alcohol dehydrogenase  
Lactate dehydrogenase  
Malate dehydrogenase

##### Specifications

>60 units

<0.003%

<0.003%

<0.003%

#### Assay Procedure

##### I. Spectrophotometric Method

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

Pipette the following reagents into a cuvette

- 2.40 mL Triethanolamine-HCl-NaOH buffer (0.1 mol/L, pH 7.5)
- 0.05 mL NADH (7 mmol/L) dissolved in Tris (10 mmol/L)
- 0.15 mL 2-Oxoglutarate (0.1 mol/L)
- 0.10 mL ADP (15 mmol/L)
- 0.20 mL Ammonium chloride (3 mol/L) in Triethanolamine-HCl-NaOH buffer (0.1 mol/L, pH 7.5)
- 0.10 mL EDTA · 4Na (25 mmol/L)
- 0.02 mL GIDH (B.L.) (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 (3.02 mL)

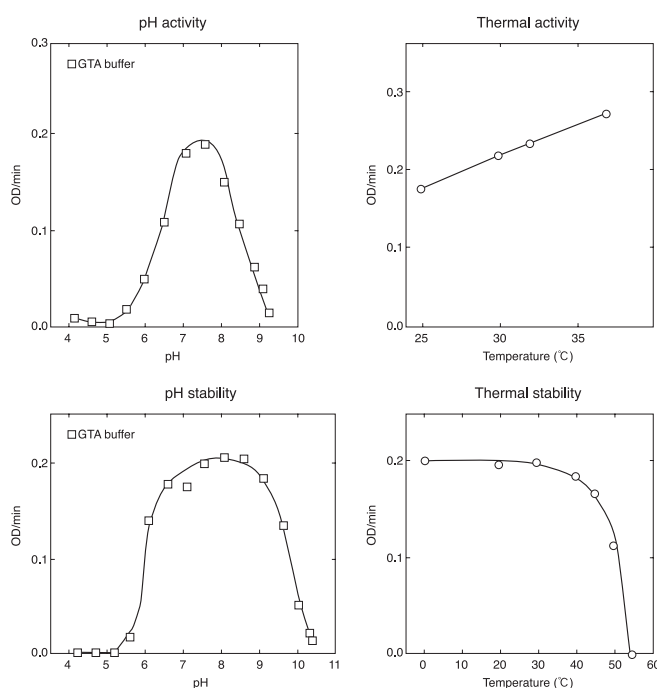
D = Enzyme dilution factor

6.3 = mM extinction coefficient of NADH  
(L · mmol<sup>-1</sup> · cm<sup>-1</sup>)

d = Light path length (1 cm)

v = Volume of enzyme sample (0.02 mL)

#### Reference Data



#### Preparation and storage

Product Code : GIDH-83

Lyophilized powder (contains no ammonium sulfate)

.....below -20°C

IU per 1 mg powder is approximately 25 units.

#### OYC No./Package

OYC No.	Package
46500083	5,000 units
46502083	50,000 units
46499903	Bulk

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

