

Malate dehydrogenase, Enzyme Activity

Catalog	Unit
TBP0035-10MG	10 mg
TBP0035-50MG	50 mg

Preparation and Specification

Appearance: Slightly yellowish amorphous powder, lyophilized

Activity: GradeII 40U/mg-solid or more

Contaminants: Glutamate oxaloacetate transaminase $\leq 1.0 \times 10^{-3}\%$

Lactate dehydrogenase $\leq 1.0 \times 10^{-3}\%$

NADH oxidase $\leq 1.0 \times 10^{-3}\%$

L-Malate : NAD⁺ oxidoreductase (EC 1.1.1.37)



Properties

Stability: Stable at -20°C for at least One year

Molecular weight: approx. 140,000

Isoelectric point: pH 4.8±0.1

Michaelis constants: $5.4 \times 10^{-5}\text{M}$ (L-Malate), $5.0 \times 10^{-6}\text{M}$ (Oxaloacetate), $8.1 \times 10^{-6}\text{M}$ (NADH)

Structure: 4 subunits per enzyme molecule

Inhibitors: Hg⁺⁺

Optimum pH: 8.0

Optimum temperature: 70°C

pH Stability: pH 3.0-9.0 (25°C, 20hr)

Thermal stability: below 70°C (pH 7.5, 15min)

Applications

This enzyme is useful for enzymatic determination of L-malate and of glutamate oxaloacetate transaminase (GOT) in clinical analysis.

For research use only