

Glycerol dehydrogenase, Enzyme Activity

Catalog	Unit
TBP0025-1KU	1000 U
TBP0025-5KU	5000 U

Preparation and Specification

Appearance: White amorphous powder, lyophilized

Activity: GradIII 50U/mg-solid or more (containing approx. 50% of stabilizers)

Contaminant: NAD oxidase $\leq 1.0 \times 10^{-3}\%$

Stabilizer: BSA

Properties

Stability: Stable at -20°C for at least 6 months

Molecular weight: approx. 390,000

Isoelectric point: 4.4 ± 0.1

Michaelis constants: $1.1 \times 10^{-2}\text{M}$ (Glycerol), $8.9 \times 10^{-5}\text{M}$ (NAD^+)

Structure: 10 subunits (42,000) per enzyme molecule

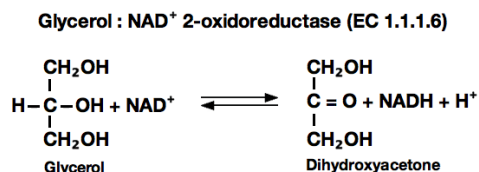
Inhibitors: p-Chloromercuribenzoate, o-phenanthroline, monoiodoacetate, heavy metal ions (Co^{++} , Ni^{++} , Cu^{++} , Zn^{++} , Cd^{++})

Optimum pH: 10.0-10.5

Optimum temperature: 50°C

pH Stability: pH 7.5-10.5 (25°C , 20hr)

Thermal stability: below 55°C (pH 7.5, 15min)



Applications

This enzyme is useful for enzymatic determination of glycerol and of triglyceride when coupled with lipoprotein lipase (LPL-311, LPL-314) in clinical analysis.

For research use only