

Glucose dehydrogenase(NAD(P)-dependent), Enzyme Activity

Catalog	Unit
TBP0020-1KU	1000 U
TBP0020-5KU	5000 U

Preparation and Specification

Appearance: White amorphous powder, lyophilized

Activity: Gradelll 250U/mg-solid or more

Contaminants: NADH oxidase $\leq 1.0 \times 10^{-3}\%$, α -Glucosidase $\leq 1.0 \times 10^{-3}\%$ Glucose-6-phosphate dehydrogenase $\leq 1.0 \times 10^{-3}\%$

Properties

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

Molecular weight: approx. 101,000 (Gel filtration)

Isoelectric point: 4.5

Michaelis constants: NAD⁺linked: $1.38 \times 10^{-2}\text{M}$ (D-Glucose) $3.09 \times 10^{-4}\text{M}$ (NAD⁺)

NADP⁺linked: $1.25 \times 10^{-2}\text{M}$ (D-Glucose) $4.07 \times 10^{-5}\text{M}$ (NADP⁺)

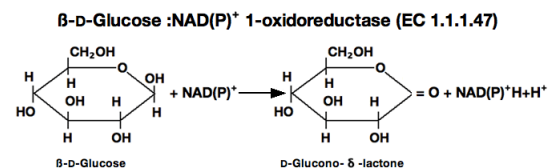
Inhibitors: Ag⁺, Hg²⁺, Monoiodoacetate

Optimum pH: 9.0

Optimum temperature: 55°C

pH Stability: pH 6.0-7.5 (20°C , 16hr)

Thermal stability: 45°C (15min-treatment with 50mM K-phosphate buffer, pH 7.0)



Applications

This enzyme is useful for enzymatic determination of D-Glucose.

For research use only