

Glucose Dehydrogenase (NAD(P)-dependent) from Microorganism

Product Code: 183629

EC no: 1.1.1.47

SKU: 183629

Category: [Enzymes](#)

PRODUCT DESCRIPTION

SPECIFICATIONS:

EC 1.1.1.47

Product name: β -D-Glucose: NAD(P)+1-oxidoreductase

Appearance: White amorphous powder lyophilized

Activity: Grade III, 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 $\leq 1.0 \times 10^{-3}\%$

Stability: Stable at - 20 °C for at least 12 months

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

Isoelectric point 4.5

Michaelis constants: NAD⁺ linked: 1.38×10^{-2} M (D-Glucose), 3.09×10^{-4} M (NAD⁺)
NADP⁺ linked: 1.25×10^{-2} M (D-Glucose), 4.07×10^{-5} 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 (15 min treatment with 50mM K-Phosphate buffer, pH 7.0)

Activity: Grade III, 250U/mg-solid or more