

Glucose-6-Phosphate Dehydrogenase from Microorganism

Product Code: 183626

EC no: 1.1.1.49

SKU: 183626

Category: [Enzymes](#)

PRODUCT DESCRIPTION

SPECIFICATIONS:

EC 1.1.1.49

Product name: D-Glucose-6-phosphate: NADP+ 1-oxydoreductase

Appearance: white amorphous powder lyophilized

Activity: Grade III, 200 U/mg-solid or more

Contaminants:

- Creatine phosphokinase $\leq 1 \times 10^{-3}\%$
- Phosphoglucomutase $\leq 1 \times 10^{-3}\%$
- 6-Phosphogluconate dehydrogenase $\leq 5 \times 10^{-3}\%$
- Phosphoglucose isomerase $\leq 1 \times 10^{-2}\%$
- Glutathione reductase $\leq 1 \times 10^{-3}\%$
- Hexokinase $\leq 1 \times 10^{-2}\%$, Myokinase $\leq 1 \times 10^{-2}\%$
- NADH oxidase $\leq 1 \times 10^{-2}\%$, NADPH oxidase $\leq 1 \times 10^{-2}\%$

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

Molecular weight: 140,000 (Gel filtration)

Michaelis constants: NAD⁺ linked: 2.4×10^{-4} M (NAD⁺), 4.7×10^{-4} M (G6P)
NADP⁺ linked: 7.4×10^{-6} M (NADP⁺), 3.2×10^{-4} M (G6P)

Inhibitors: Metal ions, Iodoacetamide, SDS etc.

Optimum pH: 7.8

Optimum temperature: 50 - 55°C

pH Stability: pH 5–11 (25°C, 22hr)

Thermal stability: Below 50 °C (pH 7.8, 30min)