

Hexokinase, Enzyme Activity

Catalog	Unit
TBP0029-1KU	1000 U
TBP0029-5KU	5000 U

Preparation and Specification

Appearance: White amorphous powder, lyophilized

Activity: Grade III 150U/mg-solid or more

Contaminants: Phosphoglucose isomerase $\leq 1.0 \times 10^{-1}\%$

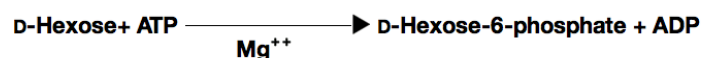
6-Phosphogluconate dehydrogenase $\leq 1.0 \times 10^{-2}\%$

Glucose-6-phosphate dehydrogenase $\leq 1.0 \times 10^{-2}\%$

Myokinase $\leq 1.0 \times 10^{-2}\%$

Glutathione reductase $\leq 5.0 \times 10^{-1}\%$

ATP: D-Hexose 6-phosphotransferase (EC 2.7.1.1)



Properties

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

Molecular weight: approx. 82,000 (by gel filtration)

Isoelectric point: 4.1 ± 0.1

Michaelis constants: $2.3 \times 10^{-4}\text{M}$ (D-Glucose), $7.7 \times 10^{-5}\text{M}$ (ATP)

Inhibitors: Metal ions, p-chloromercuribenzoate, iodoacetamide, SDS, etc

Optimum pH: 8.0-9.0

Optimum temperature: 50°C

pH Stability: pH 4.0-9.0 (25°C , 20hr)

Thermal stability: below 45°C (pH 7.0, 30min)

Applications

The enzyme is useful for enzymatic determination of glucose, adenosine-5'-triphosphate (ATP) and creatine phosphokinase when coupled with glucose-6-phosphate dehydrogenase (=G-6-PDH, G6D- 311, G6D-321).

For research use only