

HEXOKINASE

ATP: D-Hexose 6-phosphotransferase

Reaction:



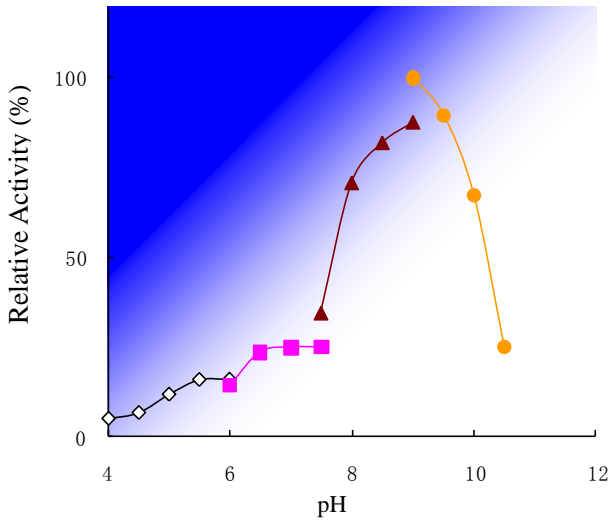
Product Description

Appearance:	White powder, lyophilized
Source:	Microorganism
Enzyme Comission Number:	EC 2.7.1.1
CAS Number:	9001-51-8
Storage Temperature	-20°C
Specific Activity:	≥ 500U/mg protein
Unit definition:	One unit will convert one micromole of D-glucose to D-glucose-6-phosphate per minute at pH 8.0 at 30°C.

Properties

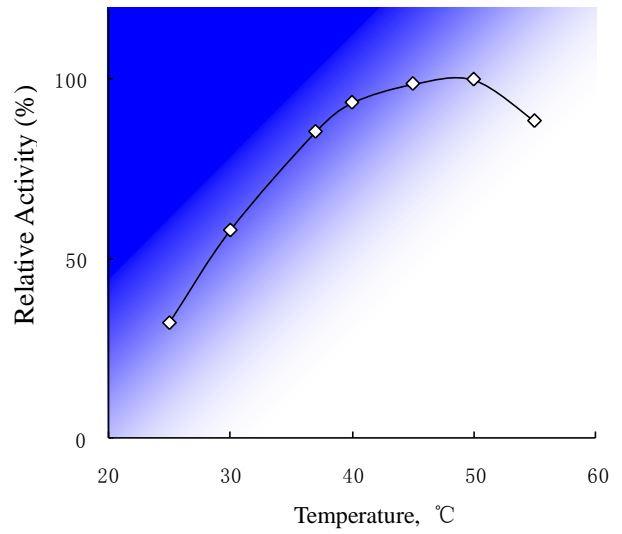
Molecular Weight:	55.0kDa (SDS-PAGE)
Isoelectric point:	5.46
Michaelis constant:	2.9 × 10 ⁻³ M(Glucose) 1.5 × 10 ⁻³ M(ATP)
Optimum pH:	9.0
Optimum temperature:	50°C~55°C
pH Stability:	5.0~7.5 (25°C, 17hr)
Thermal Stability:	< 37°C (pH8.0,30min)
Inhibitors:	Ag ⁺ , Hg ²⁺

Fig. 1 pH Optimum



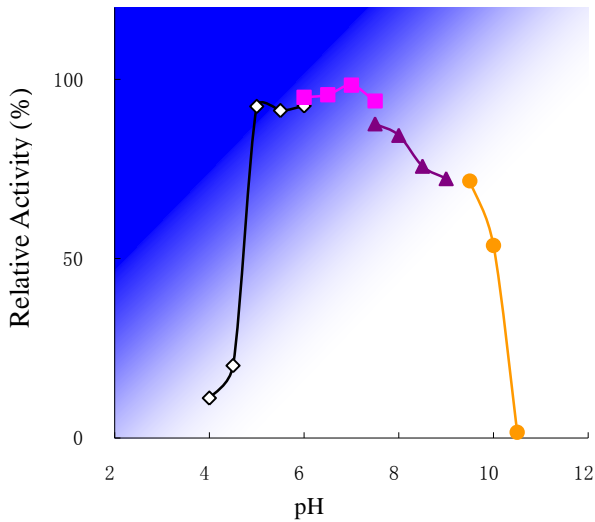
- ◇: 50mM NaAc buffer
- : 50mM K-phosphate buffer
- ▲: 50mM Tris-HCl buffer
- : 50mM Glycine-NaOH buffer

Fig.3. Optimum temperature



Buffer: 50mM K-phosphate buffer , pH 8.0

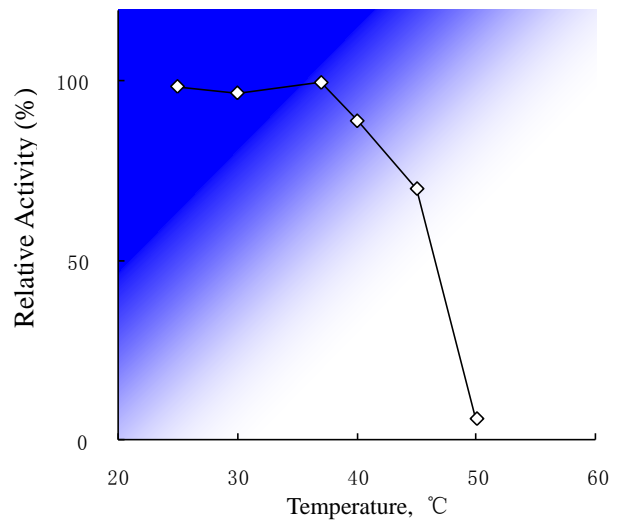
Fig. 2 pH Stability



Treatment : 25°C, 17 hr

- ◇: 50mM NaAc buffer
- : 50mM phosphate buffer
- ▲: 50mM Tris-HCl buffer
- : 50mM Glycine-NaOH buffer

Fig.4. Thermal stability



Treatment: 50mM K-phosphate buffer, pH 8.0, 30min