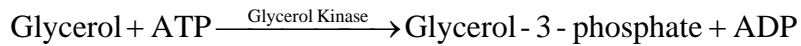


GLYCEROL KINASE

ATP:glycerol 3-phosphotransferase

Reaction:



Product Description

Appearance : White powder, lyophilized

Source : Microorganism

Enzyme Comission Number : EC 2.7.1.30

CAS Number : 9030-66-4

Storage Temperature -20

Activity : 250U/mg protein

Unit definition : One unit will convert one micromole of glycerol to glycerol-3-phosphate per min at pH 7.9 at 37 .

Properties

Molecular Weight : 55 kDa (SDS-PAGE)

Isoelectric point : 5.1

Michaelis constant: 3.8×10^{-5} M
(Glycerol)

Optimum pH: 8.0

Optimum temperature: 80

pH Stability : 5.0~10.0 (30 , 20hr)

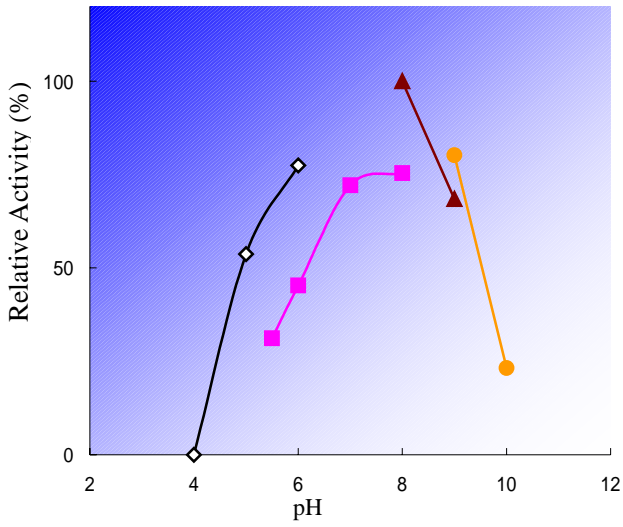
Thermal Stability : < 60 (pH7.5, 30min)

Inhibitors : Ag^+ , Hg^{2+}

Preparation Instructions

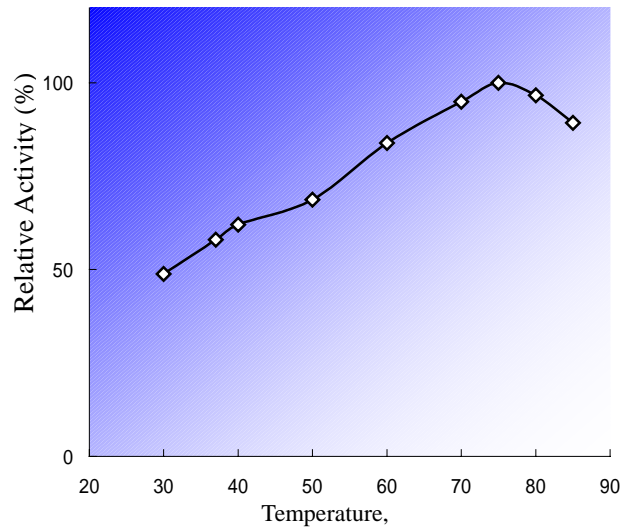
The enzyme is reconstituted in 20mM potassium phosphate buffer, pH 7.5 for activity assay.

Fig. 1 pH Optimum



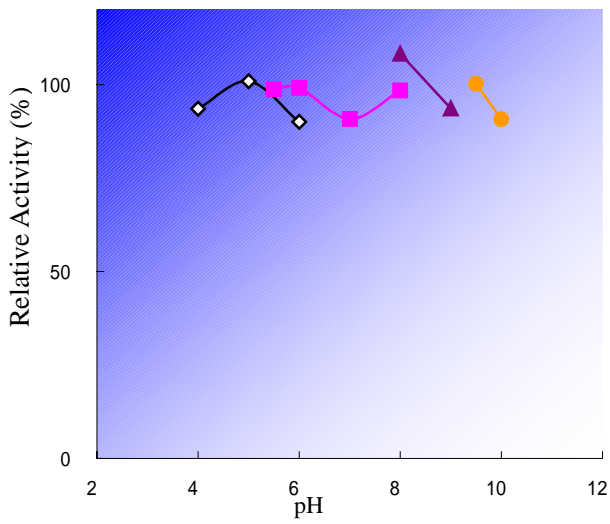
: 50mM acetate buffer
 : 50mM phosphate buffer
 : 50mM Tris-HCl buffer
 : 50mM borate buffer

Fig.3. Optimum temperature



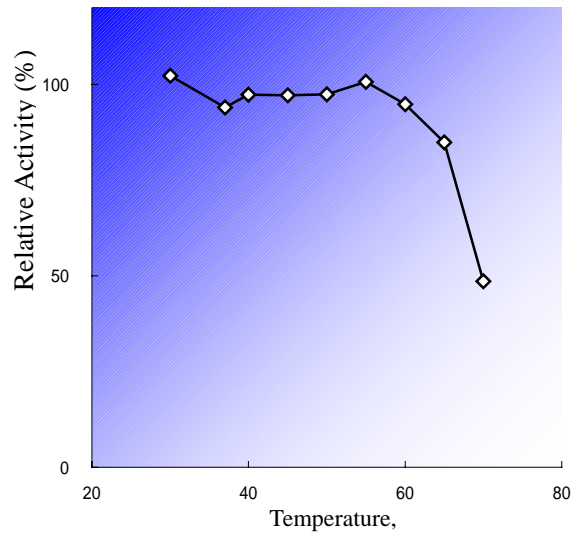
Buffer: 95.2 mM HEPES buffer , pH 7.9

Fig. 2 pH Stability



Treatment : 30 ,16 h
 : 50mM acetate buffer
 : 50mM phosphate buffer
 : 50mM Tris-HCl buffer
 : 50mM borate buffer

Fig.4. Thermal stability



Treatment: 20mM K-phosphate buffer, pH 7.5, 30min