

## Glycerol kinase, Enzyme Activity

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Catalog	Unit
TBP0026-1KU	1000 U
TBP0026-5KU	5000 U

### Preparation and Specification

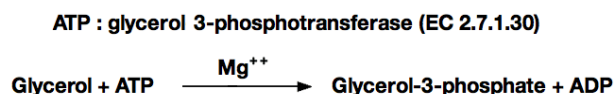
Appearance: White amorphous powder, lyophilized

Activity: Grade III 30 U/mg-solid or more

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

NADH oxidase  $\leq 1.0 \times 10^{-3}\%$

Adenosine triphosphatase  $\leq 1.0 \times 10^{-3}\%$



### Properties

Stability: Stable at  $-20^{\circ}\text{C}$  for at least One year

Molecular weight: approx. 220,000 (by gel filtration)

Structure: Four subunits of approx. 58,000

Isoelectric point: 4.3

Michaelis constants:  $9.4 \times 10^{-5}\text{M}$  (Glycerol),  $1.3 \times 10^{-5}\text{M}$  (ATP),  $2.1 \times 10^{-3}\text{M}$  (Dihydroxyacetone)

Inhibitors: p-Chloromercuribenzoate,  $\text{Hg}^{++}$ ,  $\text{Ag}^{+}$

Optimum pH: 10.0

Optimum temperature:  $70^{\circ}$

pH Stability: pH 5.5-10.0 ( $25^{\circ}\text{C}$ , 20hr)

Thermal stability: below  $65^{\circ}\text{C}$  (pH 7.5, 30min)

### Applications

This enzyme is useful for enzymatic determination of glycerol and triglyceride when coupled with glycerol-3-phosphate oxidase (=G-3-P oxidase) or pyruvate kinase and lactate dehydrogenase, lipoprotein lipase in clinical analysis.

For research use only