

P T A

Phosphotransacetylase Phosphate acetyltransferase

Acetyl-CoA : orthophosphate acetyltransferase (EC 2.3.1.8)
from Leuconostoc mesenteroides

Reaction Equation

Acetyl-CoA + Orthophosphate = CoA + Acetyl phosphate

Specification**Specific Activity**

IU/mg protein

Specifications

>5,000 units

Contaminants

Myokinase
Lactate dehydrogenase
Acetate kinase

< 0.005%
< 0.005%
< 0.005%

Assay Procedure**I . Spectrophotometric Method**

Wavelength ; 233 nm, Light path length ; 1 cm,
Temperature ; 25°C

Pipette the following reagents into a cuvette

2.60 mL Tris-HCl buffer (0.1 mol/L, pH 7.5)
containing KCl (0.115 mol/L)
0.20 mL CoA (6 mmol/L)
0.20 mL Acetylphosphate (0.109 mol/L)
0.02 mL PTA (about 3 IU/mL)

II . Calculation

$$\frac{\Delta A/\text{min} \cdot V \cdot D}{4.44 \cdot d \cdot v} = \text{IU/mL}$$

$\Delta A/\text{min}$ = The change in absorbance at 233 nm/minute

V = Total volume of reaction mixture (3.02 mL)

D = Enzyme dilution factor

4.44 = mM extinction coefficient of Acetyl CoA
($\text{L} \cdot \text{mmol}^{-1} \cdot \text{cm}^{-1}$)

d = Light path length (1 cm)

v = Volume of enzyme sample (0.02 mL)

Preparation and storage

Product Code : PTA-02

Ammonium sulfate suspension.....1°C ~ 10°C

IU per 1 ml suspension is approximately 4,000 units.

OYC No./Package

OYC No.	Package
46670002	600 units
46671002	2,400 units
46672002	7,000 units
46669902	Bulk

(Research reagent use only, not for medical use.)

