

Phosphoenolpyruvate carboxylase, Enzyme Activity

Catalog	Unit
TBP0039-1KU	1000 U
TBP0039-5KU	5000 U

Preparation and Specification

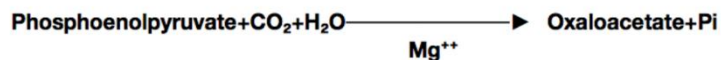
Appearance: White amorphous powder, lyophilized

Activity: 8.53 U/mg-solid

Contaminants: Lactate dehydrogenase $\leq 1.0 \times 10^{-3}\%$
Pyruvate kinase $\leq 0.5\%$

Stabilizers: BSA, sugar alcohols

Orthophosphate : oxaloacetate carboxy-lyase (Phosphorylating) (EC 4.1.1.31)



Properties

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

Molecular weight: approx. 390,000 (by gel filtration)

Isoelectric point: 6.0 ± 0.1

Structure: 4 Subunits (M.W.100,000) per enzyme molecule

Michaelis constant: $1.9 \times 10^{-4}\text{M}$ (Phosphoenolpyruvate)

Optimum pH: 7.5-8.0

Optimum temperature: 60°C

pH Stability: pH 5.0-8.0 (25°C , 24hr)

Thermal stability: below 40°C (pH 7.0, 15min)

Applications

This enzyme is useful for enzymatic determination of carbon dioxide when coupled with malate dehydrogenase in clinical analysis.

For research use only