

Certificate of Analysis

Product name: PYRUVATE KINASE (EC 2.7.1.40)

Product code: # PK

Batch: 018.00123

Test Date: February 2023

Tests	Specifications	Results	Comment
Activity (IU/ml)	> 2000	2534	Passed
Specific Activity (IU/mg of proteins ¹)	> 100	242	Passed

Unit definition

One Unit of pyruvate kinase is defined as the amount of enzyme required to convert one μ mole of phosphoenolpyruvate to pyruvate in a coupled assay with L-lactic acid dehydrogenase at T=30°C under the following assay conditions:

Imidazole buffer, pH 7.2	72 mM
ADP	7.6 mM
PEP	5.2 mM
MgCl ₂	15.2 mM
KCl	71.2 mM
NADH	0.35 mM
L-lactate dehydrogenase	13 U/mL

References

¹Determined as *Ref.*: Bradford M. M., *Analytical Biochemistry*, Vol. **72**: pp. 248-254 (1976).

Storage and use conditions

The enzyme is supplied as an ammonium sulphate suspension and should be stored at +2/+8 °C. For assay, this enzyme should be diluted in 100 mM Tris/HCl buffer, pH 7.6 containing 0.4 mg/ml BSA and 5 mM MgCl₂.

Swirl to mix the enzyme suspension immediately prior to use.

Exp. Date: February 2026

Quality Assurance

Rosaria Cassese

