

Certificate of Analysis

Product name: 6-PHOSPHO-D-GLUCOSE ISOMERASE (EC 5.3.1.9)

Product code: # PGI Batch: 001.00124

Mfg Date: January 2024

Tests	Specifications	Results	Comment
Activity (U/ml)	> 2000	2414	Passed
Specific Activity (U/mg of proteins) ¹	> 375	582	Passed

Unit definition ²

One Unit of 6-phospho-D-glucose isomerase is defined as the amount of enzyme required to produce one μ mole of NADPH from NADP+ per minute in a coupled assay with 6-phospho-D-glucose dehydrogenase at 25°C under the following assay conditions:

Tris/HCl buffer pH 7.6	88.00 mM
MgCl ₂	8.00 mM
Fructose 6-phosphate	3.15 mM
BSA	0.40 mg/ml
β-NADP ⁺	1.00 mM
Glucose 6-phosphate Dehydrogenase	8.33 U/ml

References

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 8 mM MgCl₂. Swirl to mix the enzyme suspension immediately prior to use.

Exp. Date: January 2027

Quality Assurance Rosaria Cassese

CPC BIOTECH S.r.l.

Sede Legale e Amministrativa/Registered and account office:

Via L. Galvani, 1

20875 Burago di Molgora (MB) – Italia

Tel. +39 039 6898029 Fax. +39 039 6899774 Partita IVA 00751490962 Codice Fiscale 03447450150 R.E.A.1074257

Registro Imprese di Monza e Brianza

Cap. Soc. € 114.000,00 i.v. www.cpcbiotech.it

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

² Chia-Cheng Chou et al. *JBC* Vol. **275** (30): pp. 23154-2316 (**2000**).