

# **Certificate of Analysis**

## Product name: 6-PHOSPHO-D-GLUCOSE ISOMERASE (EC 5.3.1.9) Product code: # PGI Batch: 001.00123

		Mfg Date: January 2023	
Tests	Specifications	Results	Comment
Activity (U/ml)	> 2000	2365	Passed
Specific Activity (U/mg of proteins) <sup>1</sup>	> 375	725	Passed

### Unit definition<sup>2</sup>

One Unit of 6-phospho-D-glucose isomerase is defined as the amount of enzyme required to produce one µmole of NADPH from NADP<sup>+</sup> 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 <sub>2</sub>	8.00 mM
Fructose 6-phosphate	3.15 mM
BSA	0.40 mg/ml
β-NADP <sup>+</sup>	1.00 mM
Glucose 6-phosphate Dehydrogenase	8.33 U/ml

#### **References**

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

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

#### 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 MgCl<sub>2</sub>. Swirl to mix the enzyme suspension immediately prior to use.

Exp. Date: January 2026

Quality Assurance Rosaria Cassese

melo ONOZO

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