

Certificate of Analysis

Product name: CITRATE SYNTHASE (EC 2.3.3.1) Product code: # CS Batch: 024.00222

Mfg Date: November 2022

Tests	Specifications	Results	Comment
Activity (U/ml)	> 400	470	Passed
Specific Activity (U/mg of proteins) ¹	> 15	36	Passed

Unit Unit definition²

One Unit of Citrate synthase is defined as the amount of enzyme required to produce one µmole of citric acid from oxaloacetic acid and acetyl-coenzyme A per minute at 37°C, under the following assay conditions:

Tris/HCl buffer, pH 8.0	95.00 mM
KCI	500.00 mM
Oxaloacetic acid	0.60 mM
Acetyl-coenzyme A	0.30 mM
DTNB [5,5'-Dithiobis (2-nitrobenzoic acid)]	0.30 mM

References

¹ Determined as *Ref.*: Bradford M. M., *Analytical Biochemistry*, Vol. **72**: pp. 248-254 (**1976**). ² Kurz et al., *Biochemistry*, Vol. **39**: pp. 2283-2296 (**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 imidazole buffer, pH 8.0 containing 300 mM KCl. Swirl to mix the enzyme suspension immediately prior to use.

Exp. Date: November 2025

Quality Assurance Rosaria Cassese

CPC BIOTECH S.r.I. 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