RayBiotech, Inc.

3607 Parkway Lane suite 200
Norcross,GA 30092
Tel: 770-729-2992, 1-888-494-8555
Fax: 770-206-2393
Website: www.raybiotech.com
Email: info@raybiotech.com

Certificate of Analysis and Data Sheet

Recombinant Isocitrate Dehydrogenase

Catalog No.
228-10813

Source:
Saccharomyces Cerevisiae.

Synonyms

Isocitrate dehydrogenase [NADP] cytoplasmic, EC 1.1.1.42, Cytosolic NADP-isocitrate dehydrogenase, Oxalosuccinate decarboxylase, IDH, NADP(+)-specific ICDH, IDP, PICD.

Description

Isocitrate Dehydrogenase is an enzyme of the oxidoreductase class that catalyzes the conversion of isocitrate and NAD+ to yield 2-ketoglutarate, carbon dioxide, and NADH. It occurs in cell mitochondria. The enzyme requires Mg^{2+}, Mn^{2+}; it is activated by ADP, citrate, and Ca^{2+}, and inhibited by NADH, NADPH, and ATP. The reaction is the key rate-limiting step of the citric acid (tricarboxylic) cycle. The ICDH is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered clear solution.

Formulation

One ml of solution contains 0.075 mol/l KPO4, 50% Glycerol, pH 7.1.

Stability

ICDH although stable at 15°C for 1 week should be stored between 2°C-8°C.
For long term storage it is recommended to add a carrier protein (0.1% HAS or BSA)
Please prevent freeze-thaw cycles.

Purity

Greater than 95.0% as determined by
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE.

Biological Activity

The specific activity was found to be 119 U/mg.

Unit Definition

One unit is defined as 1 umol of NAD^+ production per minute under the assay conditions (25°C, pH 7.5).