

Isocitrate Dehydrogenase-1 Active Protein | IDH1 active protein

Recombinant Yeast Isocitrate Dehydrogenase-1

CATALOG # AAA38258	HOST Yeast cells
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PRODUCT SYNONYMS

Isocitrate Dehydrogenase-1; Recombinant Yeast Isocitrate Dehydrogenase-1; IDH1; Isocitrate Dehydrogenase-1 Yeast Recombinant; Isocitrate dehydrogenase [NADP] cytoplasmic; EC 1.1.1.42; Cytosolic NADP-isocitrate dehydrogenase; Oxalosuccinate decarboxylase; IDH; NADP(+)-specific ICDH; IDP; PICD; IDH1 active protein

PRODUCT SPECIFICATIONS

Host	Yeast cells
Purity/Purification	Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Form/Format	One ml of solution contains 0.075 mol/l KPO ₄ , 50% Glycerol, pH 7.1. Sterile Filtered clear solution.
Sequence Length	416
Unit Definition	One unit is defined as 1 umol of NAD ⁺ production per minute under the assay conditions (25 degree C, pH 7.5).
Biological Activity	The specific activity was found to be 115 U/mg.

ADDITIONAL INFORMATION

Related Product Information for IDH1 active protein	Description: Recombinant Saccharomyces Cerevisiae ICDH (NADP) derived from yeast host cells by using over-expression system, is full length same as designated ICD1 from Saccharomyces Cerevisiae. The N-terminal amino acid Phenylalanine residue next to Met is substituted with Alanine for overexpression. The ICDH is purified by proprietary chromatographic techniques. Introduction: 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 Mg²⁺, Mn²⁺; it is activated by ADP, citrate, and Ca²⁺, and inhibited by NADH, NADPH, and ATP. The reaction is the key rate-limiting step of the citric acid (tricarboxylic) cycle.
Product Categories/Family for IDH1 active protein	Enzymes; Dehydrogenase

NCBI AND UNIPROT INFORMATION

NCBI GI #	15221788
NCBI GeneID	841875
NCBI Accession #	NP_175836.1
NCBI GenBank Nucleotide #	NM_104312.2
Molecular Weight	47,234 Da
NCBI Official Full Name	isocitrate dehydrogenase
NCBI Official Symbol	ICDH
NCBI Official Synonym Symbols	F20D21.16; F20D21_16; ICDH; isocitrate dehydrogenase

NCBI Protein Information	isocitrate dehydrogenase
UniProt Protein Name	Peroxisomal isocitrate dehydrogenase [NADP]
UniProt Gene Name	ICDH
UniProt Entry Name	ICDHX_ARATH

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/yeast-cells-idh1-active-protein/isocitrate-dehydrogenase-1/38258>