

Active Recombinant Human IDH2 protein, His-tagged

Cat. No. IDH2-119H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human IDH2 protein(40-452 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Human
Source	E.coli
ProteinLength	40-452 aa
Form	PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.
Bio-activity	Isocitrate Dehydrogenase 2 (IDH2) catalyzes the oxidative decarboxylation of isocitrate to alpha-ketoglutarate. There are two subclasses in the IDH family, one of them utilizing NADP+ as the electron acceptor and the other using NAD+. The protein encoded by this gene is the NADP+ dependent isocitrate dehydrogenase found in the mitochondrial. The activity of recombinant human IDH2 was measured by the ability to oxidatively decarboxylate isocitrate to 2-oxoglutarate. The reaction was performed in 25 mM Tris, 0.5 mM MnCl₂, 5 mM DTT, pH 7.5 (Assay Buffer), initiated by addition 50 μL of various concentrations of IDH2 (diluted by Assay Buffer) to 50 μL of substrate mixture consisted of 1 mM NADP+ and 2 mM isocitric acid. The final well serves as a negative control with no IDH2, replaced with 50 μL assay buffer. Incubated at 25°C for 5min, then read at a wavelength of 340 nm. The specific activity of recombinant human IDH2 is >200 Isocitrate Dehydrogenase 2 (IDH2) catalyzes the oxidative decarboxylation of isocitrate to alpha-ketoglutarate. There are two subclasses in the

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

IDH family, one of them utilizing NADP⁺ as the electron acceptor and the other using NAD⁺. The protein encoded by this gene is the NADP⁺ dependent isocitrate dehydrogenase found in the mitochondrial. The activity of recombinant human IDH2 was measured by the ability to oxidatively decarboxylate isocitrate to 2-oxoglutarate. The reaction was performed in 25 mM Tris, 0.5 mM MnCl₂, 5 mM DTT, pH 7.5 (Assay Buffer), initiated by addition 50 µL of various concentrations of IDH2 (diluted by Assay Buffer) to 50 µL of substrate mixture consisted of 1 mM NADP⁺ and 2 mM isocitric acid. The final well serves as a negative control with no IDH2, replaced with 50 µL assay buffer. Incubated at 25°C for 5min, then read at a wavelength of 340 nm. The specific activity of recombinant human IDH2 is >200 pmol/min/g.

Molecular Mass	50.3kDa
Endotoxin	<1.0EU per 1µg (determined by the LAL method).
Purity	>90%
Storage	Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 month.
Reconstitution	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	IDH2 isocitrate dehydrogenase 2 (NADP ⁺), mitochondrial [Homo sapiens]
Official Symbol	IDH2
Synonyms	IDH2; isocitrate dehydrogenase 2 (NADP ⁺), mitochondrial; isocitrate dehydrogenase [NADP], mitochondrial; NADP(+)-specific ICDH; oxalosuccinate decarboxylase; IDH;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

IDP; IDHM; IDPM; ICD-M; D2HGA2; mNADP-IDH;

Gene ID 3418

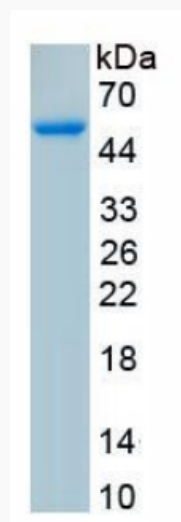
mRNA Refseq NM_002168

Protein Refseq NP_002159

MIM 147650

UniProt ID P48735

SDS-PAGE



 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA