

Recombinant Human IDH2, GST-tagged

Cat. No. IDH2-14048H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human IDH2 protein, fused to GST-tag, was expressed in E.coli and purified by GSH-sepharose.
Species	Human
Source	E.coli
ProteinLength	104-452a.a.
Description	Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. These enzymes belong to two distinct subclasses, one of which utilizes NAD(+) as the electron acceptor and the other NADP(+). Five isocitrate dehydrogenases have been reported: three NAD(+)-dependent isocitrate dehydrogenases, which localize to the mitochondrial matrix, and two NADP(+)-dependent isocitrate dehydrogenases, one of which is mitochondrial and the other predominantly cytosolic. Each NADP(+)-dependent isozyme is a homodimer. The protein encoded by this gene is the NADP(+)-dependent isocitrate dehydrogenase found in the mitochondria. It plays a role in intermediary metabolism and energy production. This protein may tightly associate or interact with the pyruvate dehydrogenase complex.
Storage	The protein is stored in PBS buffer at -20°C. Avoid repeated freezing and thawing cycles.
Storage Buffer	1M PBS (58mM Na ₂ HPO ₄ , 17mM NaH ₂ PO ₄ , 68mM NaCl, pH8.) added with 100mM

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GSH and 1% Triton X-100,15%glycerol.

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; IDP; IDHM; IDPM; ICD-M; D2HGA2; mNADP-IDH;
Gene ID	3418
mRNA Refseq	NM_002168
Protein Refseq	NP_002159
MIM	147650
UniProt ID	P48735
Chromosome Location	15q21-qter
Pathway	Citrate cycle (TCA cycle), organism-specific biosystem; Citrate cycle (TCA cycle), conserved biosystem; Citrate cycle, first carbon oxidation, oxaloacetate => 2-oxoglutarate, organism-specific biosystem; Citrate cycle, first carbon oxidation, oxaloacetate => 2-oxoglutarate, conserved biosystem; Citric acid cycle (TCA cycle), organism-specific biosystem;

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Function

NAD binding; isocitrate dehydrogenase (NADP+) activity; isocitrate dehydrogenase (NADP+) activity; magnesium ion binding; oxidoreductase activity; oxidoreductase activity, acting on the CH-OH group of donors, NAD or NADP as acceptor;

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