

Recombinant Human 2,4-Dienoyl-CoA Reductase, Mitochondrial, His-tagged

Cat. No. DECR1-971H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human DECR1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques(35-335 aa).
Species	Human
Source	E.coli
Description	DECR1 is a mitochondrial protein that exists as a homotetramer and belongs to the family of short-chain dehydrogenases/reductases. It functions as an auxiliary enzyme of beta-oxidation andt participates in the metabolism of unsaturated fatty enoyl-CoA esters. Specifically, DECR1 uses NADP+ to catalyze the reduction of 2,4-dienoyl-CoA to yield trans-3-enoyl-CoA, which can then be used as an intermediate in the Krebs cycle. Additionally, DECR1 is thought to function as a tumor suppressor, possibly downregulating the expression of Neu and slowing the rate of tumorigenesis.
Form	Liquid. In 20mM Tris-HClbuffer(pH 8.0) containing 10% glycerol,1mM DTT.
Molecular Weight	34.4 kDa (322aa), confirmed by MALDI-TOF
Purity	> 90% by SDS - PAGE
Concentration	1 mg/ml (determined by Bradford assay)
Sequences of amino	MGSSHHHHHH SSGLVPRGSH MNTEALQSKF FSPLQKAMLP PNSFQGKVAF

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acids

ITGGGTGLGK GMTTLLSSLG AQCVIASRKM DVLKATAEQI SSQTGNKVHA
 IQCDVRDPDM VQNTVSELIK VAGHPNIVIN NAAGNFISPT ERLSPNAWKT
 ITDIVLNGTA FVTLEIGKQL IKAQKGAAFL SITTIYAETG SGFVVPSASA
 KAGVEAMSKS LAAEWGKYGM RFNVIQPGPI KTKGAFSRLD PTGTFEKEMI
 GRIPCGRLGT VEELANLAAF LCSDYASWIN GAVIKFDGGE EVLISGEFND
 LRKVTKEQWD TIEELIRKTK GS

Storage

Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

GENE INFORMATION
Gene Name

[DEC R1 2,4-dienoyl CoA reductase 1, mitochondrial \[Homo sapiens\]](#)

Synonyms

DEC R1; DEC R; NADPH; SDR18C1; 2,4-dienoyl CoA reductase 1, mitochondrial; 2,4-dienoyl-CoA reductase, mitochondrial; 4-enoyl-CoA reductase; short chain dehydrogenase/reductase family 18C, member 1; 4-enoyl-CoA reductase [NADPH]; EC1.3.1.34; 2,4-dienoyl-CoA reductase [NADPH]

Gene ID

[1666](#)

mRNA Refseq

[NM_001359](#)

Protein Refseq

[NP_001350](#)

MIM

[222745](#)

UniProt ID

[Q16698](#)

**Chromosome
Location**

8q21.3

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Function

2,4-dienoyl-CoA reductase (NADPH) activity; binding; NADPH binding; 2,4-dienoyl-CoA reductase (NADPH) activity; oxidoreductase activity, acting on NADH or NADPH

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