

## Recombinant Human ECHS1, His-tagged

Cat. No. ECHS1-2811H Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant human ECHS1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques. MW = 30.6 kDa (284aa), confirmed by MALDI-TOF.

**Species** Human

**Source** E.coli

**Description** Enoyl Coenzyme A hydratase, short chain 1 mitochondrial, also known as ECHS1, is a member of the hydratase/isomerase superfamily. It localizes to the mitochondrial matrix. Expressed in muscle, liver and fibroblasts, with low expression in kidney and spleen, ECHS1 exists as a homohexamer that functions in the second step of the mitochondrial fatty acid  $\beta$ -oxidation pathway.

**Sequences Of Amino Acids**  
 MGSSHHHHHH SGLVPRGSH MASGANFEYI IAEKRGKNNT VGLIQLNRPK  
 ALNALCDGLI DELNQALKIF EEDPAVGAIV LTGGDKAFAA GADIKEMQNL  
 SFQDCYSSKF LKHWDHLTQV KKPVIAAVNG YAFGGGCELA MMCDIYAGE  
 KAQFAQPEIL IGTIPGAGGT QRLTRAVGKS LAMEMVLTGD RISAQDAKQA  
 GLVSKICPVE TLVEEAIQCA EKIASNSKIV VAMAKESVNA AFEMTLTEGS  
 KLEKLFYST FATDDRKEGM TAFVEKRKAN FKDQ

**Purity** > 95% by SDS – PAGE.

**Form** Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 20% glycerol, 100mM NaCl.

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**Concentration** 1 mg/ml (determined by Bradford assay).

**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** [ECHS1 enoyl CoA hydratase, short chain, 1, mitochondrial \[ Homo sapiens \]](#)

**Synonyms** ECHS1; enoyl CoA hydratase, short chain, 1, mitochondrial; SCEH; mitochondrial short-chain enoyl-coenzyme A hydratase 1; EC 4.2.1.17; OTTHUMP00000020811; Enoyl-CoA hydratase 1; Short chain enoyl-CoA hydratase

**Gene ID** [1892](#)

**mRNA Refseq** [NM\\_004092](#)

**Protein Refseq** [NP\\_004083](#)

**MIM** [602292](#)

**UniProt ID** [P30084](#)

**Chromosome Location** 10q26.2-q26.3

**Pathway** Benzoate degradation via CoA ligation; Butanoate metabolism; Caprolactam degradation; Fatty acid elongation in mitochondria; Fatty acid metabolism; Limonene and pinene degradation; Lysine degradation; Propanoate metabolism; Tryptophan metabolism; Valine, leucine and isoleucine degradation ; beta-Alanine metabolism; Lipid and lipoprotein metabolism; Metabolism of amino acids

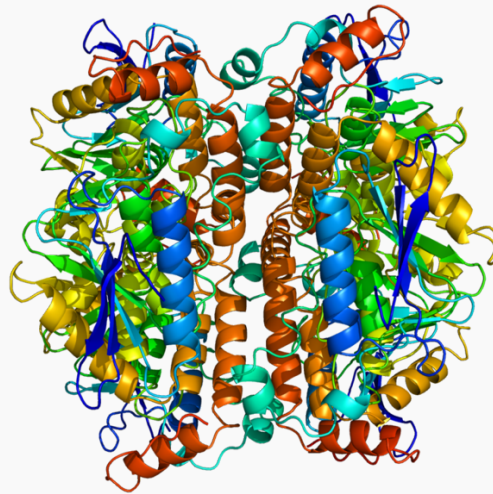
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**Function** enoyl-CoA hydratase activity; enoyl-CoA hydratase activity; lyase activity; protein binding

**PDB rendering based on 1dub.**



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