

Recombinant Human IVD, His-tagged

Cat. No. IVD-29876TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full length Human IVD with His tag; amino acids 30-423 , MWt 45.3kDa.
Species	Human
Source	E.coli
ProteinLength	30-423 a.a.
Description	Isovaleryl-CoA dehydrogenase (IVD) is a mitochondrial matrix enzyme that catalyzes the third step in leucine catabolism. The genetic deficiency of IVD results in an accumulation of isovaleric acid, which is toxic to the central nervous system and leads to isovaleric acidemia. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.
Conjugation	HIS
Form	Liquid
Purity	>90% by SDS-PAGE
Storage buffer	Preservative: None Constituents: 10% Glycerol, 20mM Tris HCl, 1mM DTT, pH 8.0
Storage	Store at +4°C short term (1-2 weeks). Aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

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Sequences of amino acids

MGSSHHHHHH SSGLVPRGSH MHSLLPVDDA INGLSEEQRQ LRQTMAKFLQ
 EHLAPKAQEI DRSNEFKNLR EFWKQLGNLG VLGITAPVQY GGSGLGYLEH
 VLMEEISRA SGAVGLSYGA HSNLCINQLV RNGNEAQKEK YLPKLISGEY
 IGALAMSEPN AGSDVSMKL KAEKKGNHYI LNGNKFWITN GPDADVLIVY
 AKTDLAAPVA SRGITAFIVE KGMPGFSTSK KLDKLGMRGS NTCELIFEDC
 KIPAANILGH ENKGVVYVLS GLDLERLVLA GGPLGLMQAV LDHTIPYLHV
 REAFGQKIGH FQLMQGKMAD MYTRLMACRQ YVYNVAKACD EGHCTAKDCA
 GVILYSAECA TQVALDGIQC FGGNGYINDF PMGRFLRDAK LYEIGAGTSE
 VRRLVIGRAF NADFH

Sequence Similarities

Belongs to the acyl-CoA dehydrogenase family.

Full Length

Full L.

GENE INFORMATION
Gene Name

IVD isovaleryl-CoA dehydrogenase [Homo sapiens]

Official Symbol

IVD

Synonyms

IVD; isovaleryl-CoA dehydrogenase; isovaleryl CoA dehydrogenase , isovaleryl Coenzyme A dehydrogenase; isovaleryl-CoA dehydrogenase, mitochondrial; ACAD2;

Gene ID

3712

mRNA Refseq

NM_001159508

Protein Refseq

NP_001152980

MIM

607036

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Uniprot ID	P26440
Chromosome Location	15q14-q15
Pathway	Branched-chain amino acid catabolism, organism-specific biosystem; Leucine degradation, leucine => acetoacetate + acetyl-CoA, organism-specific biosystem; Leucine degradation, leucine => acetoacetate + acetyl-CoA, conserved biosystem;
Function	flavin adenine dinucleotide binding; isovaleryl-CoA dehydrogenase activity; isovaleryl-CoA dehydrogenase activity;

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