Recombinant Human IVD, His-tagged

Cat. No. IVD-29875TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full length Human IVD with a N terminal His tag; 415aa, 45.3 kDa.
Species	Human
Source	E.coli
ProteinLength	394 amino acids
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
Molecular Weight	45.300kDa inclusive of tags
Form	Liquid
Purity	>90% by SDS-PAGE
Storage buffer	pH: 8.00Constituents:0.32% Tris HCl, 0.02% DTT, 10% Glycerol
Storage	Please see Notes section

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Sequences of amino acids	MGSSHHHHHH SSGLVPRGSH MHSLLPVDDA INGLSEEQRQ LRQTMAKFLQ EHLAPKAQEI DRSNEFKNLR EFWKQLGNLG VLGITAPVQY GGSGLGYLEH VLVMEEISRA SGAVGLSYGA HSNLCINQLV RNGNEAQKEK YLPKLISGEY IGALAMSEPN AGSDVVSMKL KAEKKGNHYI LNGNKFWITN GPDADVLIVY AKTDLAAVPA SRGITAFIVE KGMPGFSTSK KLDKLGMRGS NTCELIFEDC KIPAANILGH ENKGVYVLMS GLDLERLVLA GGPLGLMQAV LDHTIPYLHV REAFGQKIGH FQLMQGKMAD MYTRLMACRQ YVYNVAKACD EGHCTAKDCA GVILYSAECA TQVALDGIQC FGGNGYINDF PMGRFLRDAK LYEIGAGTSE VRRLVIGRAF NADFH
Sequence Similarities	Belongs to the acyl-CoA dehydrogenase family.

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
Uniprot ID	P26440

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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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