

IVD, 33-426aa, Human, His tag, E.coli

Cat.NO.: TP02701

3th Edition

**Synonyms:** Isovaleryl-CoA dehydrogenase, mitochondrial, ACAD2

**Description:** IVD (Isovaleryl Coenzyme A dehydrogenase) is a mitochondrial matrix enzyme that belongs to the acyl-CoA dehydrogenase family. IVD is a homotetrameric flavoenzyme which catalyzes the conversion of isovaleryl-CoA to 3-methylcrotonyl-CoA. Defects of the IVD gene lead to ineffective isoforms that are the underlying cause of isovaleric acidemia. Recombinant human IVD protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

**Form:** Liquid. In 20 mM Tris-HCl buffer (pH8.0) containing 1mM DTT, 10% glycerol

**Molecular Weight:** 45.3 kDa (415aa)

**Sequences:**

MGSSHHHHHSSGLVPRGSHMHSLLPVDDAINGLSEEQRQLRQTMAKFLQEHLAPKAQEIDRSNEFKNLREFWK  
QLGNLGVLGITAPVQYGGSGLGYLEHVLVMEIISRASGAVGLSYGAHSNLCINQLVRNGNEAQKEYLPKLISGEYI  
GALAMSEPNAGSDVVSMLKAEKKGNHYILNGNKFITNGPDADVLIYAKTDLAAPASRGITAFIVEKGMPPGFST  
SKKLDKLGMRGNTCELIFEDCKIPAANILGHENKGVYVLMGDLRLVLAGGPLGLMQAVLDHTIPYLHVREAFG  
QKIGHFQLMQGKMADMYTRLMACRQYVYNVAKACDEGHCTAKDCAGVILYSAECATQVALDGIQCFGGNGYINDF  
PMGRFLRDAKLYEIGAGTSEVRRLVIGRAFNADFH

**Purity:** > 95% by HPLC

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

**Endotoxin Level:** <1.0 EU per 1 µg of protein (determined by LAL method)

**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.