

# Product information



## ACAD8, 23-415aa

Human, His-tagged, Recombinant, *E.coli*

Cat. No. IBATGP2421

**Full name:** isobutyryl-CoA dehydrogenase, mitochondrial

**NCBI Accession No.:** NP\_055199

**Synonyms:** ACAD-8, ARC42

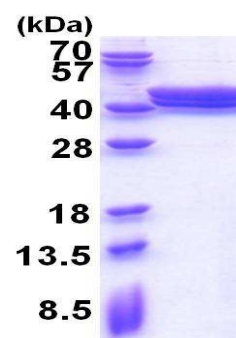
**Description:** ACAD8 is a member of the acyl-CoA dehydrogenase family of enzymes that catalyze the dehydrogenation of acyl-CoA derivatives in the metabolism of fatty acids or branch chained amino acids. The protein is a mitochondrial enzyme that functions in catabolism of the branched-chain amino acid valine. Defects in this gene are the cause of isobutyryl-CoA dehydrogenase deficiency. Recombinant human ACAD8 protein, fused to His-tag at N-terminus, was expressed in *E.coli* and purified by using conventional chromatography techniques.

**Form:** Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 30% glycerol, 1mM DTT

**Molecular Weight:** 45.1kDa (416aa) confirmed by MALDI-TOF

**Purity:** > 95% by SDS - PAGE

**Concentration:** 0.25 mg/ml (determined by Bradford assay)



15% SDS-PAGE (3ug)

### Sequences of amino acids:

MGSSHHHHH SSGLVPRGSH MGSLVQTGHR SLTSCIDPSM GLNEEQKEFQ KVAFDFAARE MAPNMAEWDQ KELFPVDVMR KAAQLGFGGV  
YIQTDVGGSG LSRLDTSVIF EALATGCTST TAYISIHNC AWMIDSFGNE EQRHKFCPPL CTMEKFASYC LTEPGSGSDA ASLLTSAKKQ  
GDHYILNGSK AFISGAGESD IYVVMCRTGG PGPKGISCIV VEKGTPLSF GKKEKKVGNW SQPTRAVIFE DCAVPVANRI GSEGQGFLLA  
VRGLNGGRIN IASCSLGA AH ASVILTRDHL NVRKQFGEPL ASNQYLQFTL ADMATRLVAA RLMVRNAAVA LQEERKDAVA LC SMAKLFAT  
DECFAICNQA LQMGGYGYL KDYAVQQYVR DSRVHQILEG SNEVMRILIS RSLLE

### General references:

Hendrickson, S.L., *et al.* (2010) *PLoS ONE* 5 (9), E12862

Battaile, K.P., *et al.* (2004) *J. Biol. Chem.* 279 (16), 16526-16534

**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.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.



Manufactured for:

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