

**AR51241PU-S****Human ACAD8 (23-415, His-tag) - Purified****Alternate names:**

ARC42, Activator-recruited cofactor 42 kDa component, Acyl-CoA dehydrogenase family member 8, IBD, Isobutyryl-CoA dehydrogenase mitochondrial

**Quantity:**

0.1 mg

**Concentration:**

0.25 mg/ml (determined by Bradford assay)

**Background:**

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.

**Uniprot ID:**[Q9UKU7](#)**NCBI:**[NP\\_055199](#)**GeneID:**[27034](#)**Species:**

Human

**Source:**

E. coli

**Format:****State:** Liquid purified protein**Purity:** >95% by SDS - PAGE**Buffer System:** 20 mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 30% glycerol, 1mM DTT**Description:**

Recombinant human ACAD8 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

**AA Sequence:**

MGSSHHHHHH SSGLVPRGSH MGSLVQTGHR SLTSCIDPSM GLNEEQKEFQ KVAFDFAARE  
MAPNMAEWDQ KELFPVDVMR KAAQLGFGGV YIQTDVGGSG LSRLDTSVIF EALATGCTST  
TAYISIHNC AWMIDSFGNE EQRHKFCPPL CTMEKFASYC LTEPGSGSDA ASLLTSAKKQ  
GDHYIILNGSK AFISGAGESD IYVVMCRTGG PGPKGISCIV VEKGTPLSF GKKEKKVGN  
SQPTRAVIFE DCAVPVANRI GSEGQGFLLA VRGLNGGRIN IASCSLGAH ASVILTRDHL  
NVRKQFGEPL ASNQYLQFTL ADMATRLVAA RLMVRNAAVA LQEERKDAVA LCSMAKLFAT  
DECFAICNQA LQMHGGYGYL KDYAVQQYVR DSRVHQILEG SNEVMRILIS RSLQLQ

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

Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer.  
Avoid repeated freezing and thawing. Shelf life: one year from despatch.

**General Readings:**

Hendrickson, S.L., et al. (2010) PLoS ONE 5 (9), E12862 Battaile, K.P., et al. (2004) J. Biol. Chem. 279 (16), 16526-16534

Pictures:

