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**Product Data Sheet**


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Product Name: ACAD8 Human

Cat. No.: GP21328

Batch No.: 1

**Product Data**

Purity &gt;98%

Source Escherichia Coli.

Physical Appearance solid

Shipping Condition Shipped with Ice Packs.

Synonyms Acyl-CoA dehydrogenase family member 8 mitochondrial; ACAD-8; Isobutyryl-CoA dehydrogenase; Activator-recruited cofactor 42 kDa component; ARC42; FLJ22590.

Amino Acid Sequence  
 MGSSHHHHH SGLVPRGSH MGSLVQTGHR SLTSCIDPSM GLNEEQKEFQ  
 KVAFDFAARE MAPNMAEWDQ KELFPVDVMR KAAQLGFGGV YIQTDVGGSG  
 LSRLDTSVIF EALATGCTST TAYISIHNMCAWMIDSGNE EQRHKFCPPL  
 CTMEKFASYC LTEPGSGSDA ASLLTSAKKQ GDHYILNGSK AFISGAGESD  
 IYVVMCRTGG PGPKGISCIV VEKGTPLSF GKKEKKVGWN SQPTRAVIFE  
 DCAVPVANRI GSEGQGLIA VRGLNGGRIN IASCSLGA AH ASVILTRDHL  
 NVRKQFGEPL ASNQYLQFTL ADMATRLVAA RLMVRNAAVA LQEERKDAVA  
 LCSMAKLFAT DECFAICNQA LQMHGGYGYL KDYAVQQYVR DSRVHQILEG  
 SNEVMRILIS RSLLE.

Formulation The ACAD8 solution contains 20mM Tris-HCl buffer (pH 8.0), 0.15M NaCl, 1mM DTT and 30% glycerol.

**Introduction**

Acyl CoA dehydrogenase is the enzyme used to catalyze the first step of  $\beta$ -oxidation in fatty acid metabolism. Acyl-coenzyme A (CoA) dehydrogenases (ACADs) are a family of mitochondrial enzymes that catalyze the first dehydrogenation step in the  $\beta$ -oxidation of fatty acyl-CoA derivatives. Several human ACADs exist and all ACADs catalyze the same initial dehydrogenation of the substrate at the beta-carbon atom and require electron transfer flavoprotein as an electron acceptor. The predicted 415-amino acid ACAD8 protein contains many of the residues conserved in most other ACADs, including an active site glutamic acid residue and residues important for tetramer formation.

**Stability**

**Caution: Product has not been fully validated for medical applications. For research use only.**

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Store at 4°C if entire vial will be used within 2-4 weeks.

### Background

ACAD8 Human Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 416 amino acids (23-415) and having a molecular mass of 45.1kDa.

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