



Recombinant Protein Technical Manual  
Recombinant Human ACADM/MCAD Protein (His  
Tag)  
RPES1858

### Product Data:

**Product SKU:** RPES1858

**Size:** 10µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** P11310

### Protein Information:

**Molecular Mass:** 45.9 kDa

**AP Molecular Mass:** 42 kDa

**Tag:** N-6His

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

**Shipping:** This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

**Formulation:** Supplied as a 0.2 µm filtered solution of 20mM Tris, 0.1M NaCl, 20% Glycerol, pH 8.5.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Medium-Chain Specific Acyl-CoA Dehydrogenase Mitochondrial; MCAD; ACADM

## Immunogen Information:

**Sequence:** Lys26-Asn421

## Background:

Medium-Chain Specific Acyl-CoA Dehydrogenase (ACADM) is a mitochondrial fatty acid beta-oxidation that belongs to the acyl-CoA dehydrogenase family. ACADM is a homotetramer enzyme that catalyzes the initial step of the mitochondrial fatty acid beta-oxidation pathway. ACADM is specific for acyl chain lengths of 4 to 16. It is essential for converting these particular fatty acids to energy, especially during fasting periods. Defects in ACADM cause medium-chain acyl-CoA dehydrogenase deficiency, a disease characterized by hepatic dysfunction, fasting hypoglycemia, and encephalopathy, which can result in infantile death.