

**ERAB Rabbit mAb**  
Catalog # AP77713

**Specification**

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**ERAB Rabbit mAb - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">Q99714</a>
Reactivity	<b>Human, Mouse, Rat</b>
Host	<b>Rabbit</b>
Clonality	<b>Monoclonal Antibody</b>
Calculated MW	<b>26923</b>

**ERAB Rabbit mAb - Additional Information**

**Gene ID** 3028

**Other Names**  
HSD17B10

**Dilution**  
WB~~1/500-1/1000

**Format**  
Liquid

**ERAB Rabbit mAb - Protein Information**

**Name** HSD17B10

**Synonyms** ERAB, HADH2, MRPP2, SCHAD, SDR5C1, XH98G

**Function**

Mitochondrial dehydrogenase involved in pathways of fatty acid, branched-chain amino acid and steroid metabolism (PubMed: [10600649](http://www.uniprot.org/citations/10600649), PubMed: [12917011](http://www.uniprot.org/citations/12917011), PubMed: [18996107](http://www.uniprot.org/citations/18996107), PubMed: [19706438](http://www.uniprot.org/citations/19706438), PubMed: [20077426](http://www.uniprot.org/citations/20077426), PubMed: [25925575](http://www.uniprot.org/citations/25925575), PubMed: [26950678](http://www.uniprot.org/citations/26950678), PubMed: [28888424](http://www.uniprot.org/citations/28888424), PubMed: [9553139](http://www.uniprot.org/citations/9553139)). Acts as (S)-3-hydroxyacyl-CoA dehydrogenase in mitochondrial fatty acid beta-oxidation, a major degradation pathway of fatty acids. Catalyzes the third step in the beta-oxidation cycle, namely the reversible conversion of (S)-3-hydroxyacyl-CoA to 3-ketoacyl-CoA. Preferentially accepts straight medium- and short-chain acyl-CoA substrates with highest efficiency for (3S)-hydroxybutanoyl-CoA (PubMed: [10600649](http://www.uniprot.org/citations/10600649), PubMed: [10600649](http://www.uniprot.org/citations/10600649)).

[12917011](http://www.uniprot.org/citations/12917011), PubMed: [25925575](http://www.uniprot.org/citations/25925575), PubMed: [26950678](http://www.uniprot.org/citations/26950678), PubMed: [9553139](http://www.uniprot.org/citations/9553139)). Acts as 3-hydroxy-2-methylbutyryl-CoA dehydrogenase in branched-chain amino acid catabolic pathway. Catalyzes the oxidation of 3-hydroxy-2-methylbutanoyl-CoA into 2-methyl-3-oxobutanoyl-CoA, a step in isoleucine degradation pathway (PubMed: [18996107](http://www.uniprot.org/citations/18996107), PubMed: [19706438](http://www.uniprot.org/citations/19706438), PubMed: [20077426](http://www.uniprot.org/citations/20077426)). Has hydroxysteroid dehydrogenase activity toward steroid hormones and bile acids. Catalyzes the oxidation of 3 $\alpha$ -, 17 $\beta$ -, 20 $\beta$ - and 21- hydroxysteroids and 7 $\alpha$ - and 7 $\beta$ -hydroxy bile acids (PubMed: [10600649](http://www.uniprot.org/citations/10600649), PubMed: [12917011](http://www.uniprot.org/citations/12917011), PubMed: [19706438](http://www.uniprot.org/citations/19706438), PubMed: [28888424](http://www.uniprot.org/citations/28888424)). Has phospholipase C-like activity toward cardiolipin and its oxidized species. Likely oxidizes the 2'-hydroxyl in the head group of cardiolipin to form a ketone intermediate that undergoes nucleophilic attack by water and fragments into diacylglycerol, dihydroxyacetone and orthophosphate. Has higher affinity for cardiolipin with oxidized fatty acids and may degrade these species during the oxidative stress response to protect cells from apoptosis (PubMed: [26338420](http://www.uniprot.org/citations/26338420)). By interacting with intracellular amyloid-beta, it may contribute to the neuronal dysfunction associated with Alzheimer disease (AD) (PubMed: [9338779](http://www.uniprot.org/citations/9338779)). Essential for structural and functional integrity of mitochondria (PubMed: [20077426](http://www.uniprot.org/citations/20077426)).

#### Cellular Location

Mitochondrion. Mitochondrion matrix, mitochondrion nucleoid

#### Tissue Location

Ubiquitously expressed in normal tissues but is overexpressed in neurons affected in AD.

#### ERAB Rabbit mAb - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### ERAB Rabbit mAb - Images



