

ERAB Rabbit mAb
Catalog # AP77713

Specification

ERAB Rabbit mAb - Product Information

Application	WB
Primary Accession	Q99714
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	26923

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 α -, 17 β -, 20 β - and 21- hydroxysteroids and 7 α - and 7 β -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



