

# EHHADH Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8636b

#### Specification

# **EHHADH Antibody (C-term) - Product Information**

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region WB, IHC-P, FC,E <u>008426</u> <u>P07896</u>, <u>09DBM2</u> Human, Mouse, Rat Rabbit Polyclonal Rabbit IgG 662-690

### **EHHADH Antibody (C-term) - Additional Information**

Gene ID 1962

Other Names Peroxisomal bifunctional enzyme, PBE, PBFE, Enoyl-CoA hydratase/3, 2-trans-enoyl-CoA isomerase, 3-hydroxyacyl-CoA dehydrogenase, EHHADH, ECHD

#### Target/Specificity

This EHHADH antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 662-690 amino acids from the C-terminal region of human EHHADH.

**Dilution** WB~~1:1000 IHC-P~~1:10~50 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** 

EHHADH Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### **EHHADH Antibody (C-term) - Protein Information**

Name EHHADH (<u>HGNC:3247</u>)



# Synonyms ECHD

**Function** Peroxisomal trifunctional enzyme possessing 2-enoyl-CoA hydratase, 3-hydroxyacyl-CoA dehydrogenase, and delta 3, delta 2-enoyl- CoA isomerase activities. Catalyzes two of the four reactions of the long chain fatty acids peroxisomal beta-oxidation pathway (By similarity). Can also use branched-chain fatty acids such as 2-methyl- 2E-butenoyl-CoA as a substrate, which is hydrated into (2S,3S)-3- hydroxy-2-methylbutanoyl-CoA (By similarity). Optimal isomerase for 2,5 double bonds into 3,5 form isomerization in a range of enoyl-CoA species (Probable). Also able to isomerize both 3-cis and 3-trans double bonds into the 2-trans form in a range of enoyl-CoA species (By similarity). With HSD17B4, catalyzes the hydration of trans-2-enoyl-CoA and the dehydrogenation of 3-hydroxyacyl-CoA, but with opposite chiral specificity (PubMed:<u>15060085</u>). Regulates the amount of medium-chain dicarboxylic fatty acids which are essential regulators of all fatty acid oxidation pathways (By similarity). Also involved in the degradation of long-chain dicarboxylic acids through peroxisomal beta- oxidation (PubMed:<u>15060085</u>).

Cellular Location Peroxisome.

### **Tissue Location**

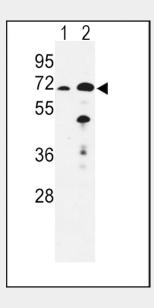
Liver and kidney. Strongly expressed in the terminal segments of the proximal tubule. Lower amounts seen in the brain.

# EHHADH Antibody (C-term) - Protocols

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

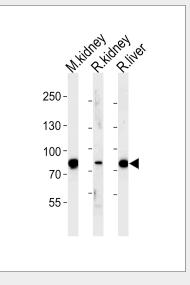
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### EHHADH Antibody (C-term) - Images

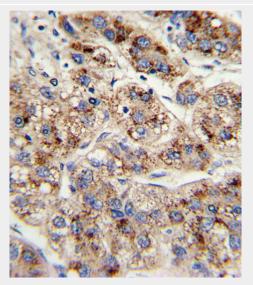




Western blot analysis of EHHADH Antibody (C-term) (Cat. #AP8636b) in mouse liver(lane 1), kidney(lane 2) tissue lysates (35ug/lane). EHHADH (arrow) was detected using the purified Pab.

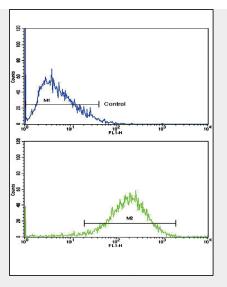


Western blot analysis of lysates from mousr kidney, rat kidney and liver tissue (from left to right), using EHHADH Antibody (C-term)(Cat. #AP8636b). AP8636b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



Formalin-fixed and paraffin-embedded human hepatocarcinoma with EHHADH Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





Flow cytometric analysis of HepG2 cells using EHHADH Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# EHHADH Antibody (C-term) - Background

EHHADH is a bifunctional enzyme and is one of the four enzymes of the peroxisomal beta-oxidation pathway. The N-terminal region of the encoded protein contains enoyl-CoA hydratase activity while the C-terminal region contains 3-hydroxyacyl-CoA dehydrogenase activity.

# **EHHADH Antibody (C-term) - References**

Chen,G.L., et.al., Biochem. Biophys. Res. Commun. 178 (3), 1084-1091 (1991) Lu,Y., et.al., J. Lipid Res. 49 (12), 2582-2589 (2008)