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EHHADH Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8636b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q08426
Other Accession	P07896, Q9DBM2
Reactivity	Human, Rat, Mouse
Predicted	Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	79495
Antigen Region	662-690

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~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
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.

Protein Information

Name	EHHADH (HGNC:3247)
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:15060085). 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:15060085).
Cellular Location	Peroxisome.
Tissue Location	Liver and kidney. Strongly expressed in the terminal segments of the proximal tubule. Lower amounts seen in the brain.

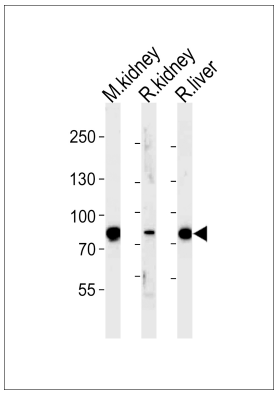
Background

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.

References

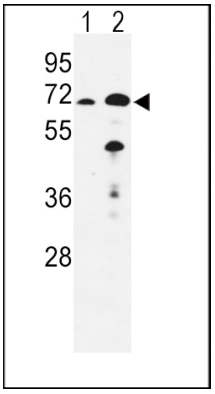
Chen,G.L., et.al., Biochem. Biophys. Res. Commun. 178 (3), 1084-1091 (1991)
Lu,Y., et.al., J. Lipid Res. 49 (12), 2582-2589 (2008)

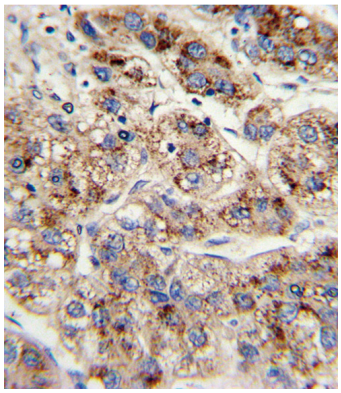
Images



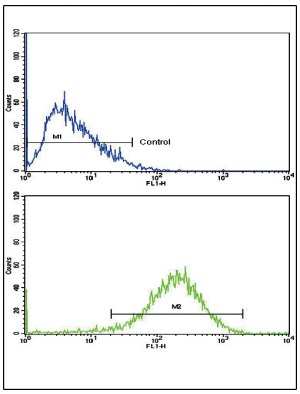
Western blot analysis of lysates from mousr kidney, rat kidney and liver tissue (from left to right), using EHHADH Antibody (C-term)(Cat. #AP8636b). AP8636b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

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.





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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.