10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-EHHADH Antibody

Catalog # AP51182

Product Information

Application	WB, IHC
Primary Accession	Q08426
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	79495

Additional Information

Gene ID	1962
Other Names	ECHD; Peroxisomal bifunctional enzyme; PBE; PBFE
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human EHHADH. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

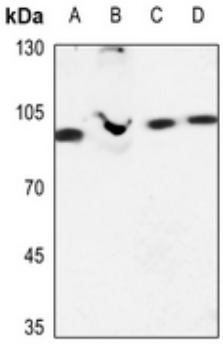
Name	EHHADH (HGNC:3247)
Synonyms	ECHD
Function	Peroxisomal trifunctional enzyme possessing 2-enoyl-CoA hydratase, 3-hydroxyacyl-CoA dehydrogenase, and delta 3, delta 2-enoyl- CoA isomerase activities. Catalyzes two of the four reactions of the long chain fatty acids peroxisomal beta-oxidation pathway (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.

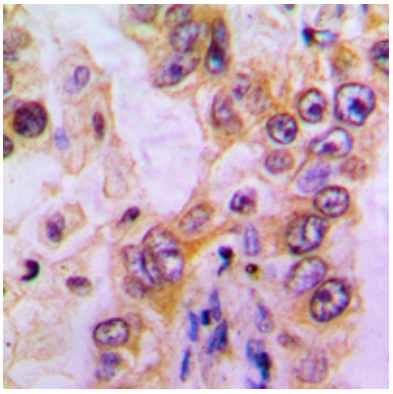
References

Hoefler G.,et al.Genomics 19:60-67(1994).
Cherkaoui-Malki M.,et al.Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Totoki Y.,et al.Submitted (APR-2005) to the EMBL/GenBank/DDBJ databases.
Muzny D.M.,et al.Nature 440:1194-1198(2006).

Images



Western blot analysis of EHHADH expression in HEK293T (A), K562 (B), rat liver (C), rat kidney (D) whole cell lysates. (Predicted band size: 79 kD; Observed band size: 100 kD)



Immunohistochemical analysis of EHHADH staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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