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HSD17B4 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12516c

Product Information

Application	WB, IHC-P, E
Primary Accession	P51659
Other Accession	NP_000405.1
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB31274
Calculated MW	79686
Antigen Region	341-370

Additional Information

Gene ID	3295
Other Names	Peroxisomal multifunctional enzyme type 2, MFE-2, 17-beta-hydroxysteroid dehydrogenase 4, 17-beta-HSD 4, D-bifunctional protein, DBP, Multifunctional protein 2, MPF-2, (3R)-hydroxyacyl-CoA dehydrogenase, 111n12, Enoyl-CoA hydratase 2, 3-alpha, 7-alpha, 12-alpha-trihydroxy-5-beta-cholest-24-enoyl-CoA hydratase, HSD17B4, EDH17B4
Target/Specificity	This HSD17B4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 341-370 amino acids from the Central region of human HSD17B4.
Dilution	WB~~1:1000 IHC-P~~1:100~500 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	HSD17B4 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	HSD17B4 (HGNC:5213)
Synonyms	EDH17B4, SDR8C1
Function	Bifunctional enzyme acting on the peroxisomal fatty acid beta-oxidation pathway. Catalyzes two of the four reactions in fatty acid degradation: hydration of 2-enoyl-CoA (trans-2-enoyl-CoA) to produce (3R)-3-hydroxyacyl-CoA, and dehydrogenation of (3R)-3- hydroxyacyl-CoA to produce 3-ketoacyl-CoA (3-oxoacyl-CoA), which is further metabolized by SCPx. Can use straight-chain and branched-chain fatty acids, as well as bile acid intermediates as substrates. May play a role in peroxisomal beta-oxidation step in polyunsaturated fatty acids (PUFAs) biosynthesis. Possibly regulates systemic levels of docosahexaenoic acid (DHA, C22:6n-3) through a process involving endoplasmic reticulum desaturation and elongation of alpha-linolenic acid (ALA, C18:3n-3) to form tetracosahexaenoic acid (THA, C24:6n-3), which is then beta-oxidized to DHA in peroxisomes.
Cellular Location	Peroxisome.
Tissue Location	Present in many tissues with highest concentrations in liver, heart, prostate and testis

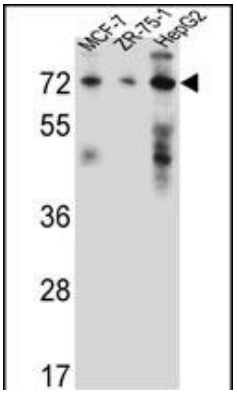
Background

The protein encoded by this gene is a bifunctional enzyme that is involved in the peroxisomal beta-oxidation pathway for fatty acids. It also acts as a catalyst for the formation of 3-ketoacyl-CoA intermediates from both straight-chain and 2-methyl-branched-chain fatty acids. Defects in this gene that affect the peroxisomal fatty acid beta-oxidation activity are a cause of D-bifunctional protein deficiency (DBPD). An apparent pseudogene of this gene is present on chromosome 8. [provided by RefSeq].

References

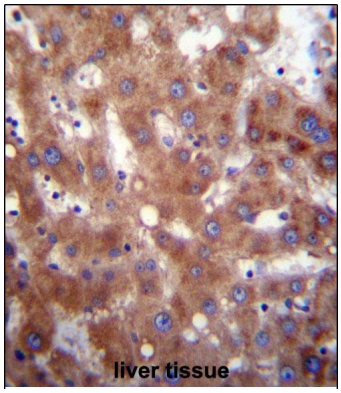
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Images



HSD17B4 Antibody (Center) (Cat. #AP12516c) western blot analysis in MCF-7,ZR-75-1,HepG2 cell line lysates (35ug/lane).This demonstrates the HSD17B4 antibody detected the HSD17B4 protein (arrow).

HSD17B4 Antibody (Center) (Cat. #AP12516c)immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed



by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of HSD17B4 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

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