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Anti-HSD17B4 Antibody

Catalog # AP60180

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P51659
Reactivity	Human, Mouse, Rat, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	79686

Additional Information

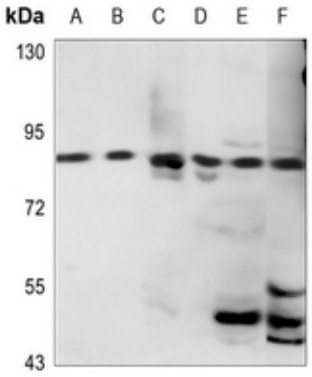
Gene ID	3295
Other Names	EDH17B4; Peroxisomal multifunctional enzyme type 2; MFE-2; 17-beta-hydroxysteroid dehydrogenase 4; 17-beta-HSD 4; D-bifunctional protein; DBP; Multifunctional protein 2; MPF-2
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human HSD17B4. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
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

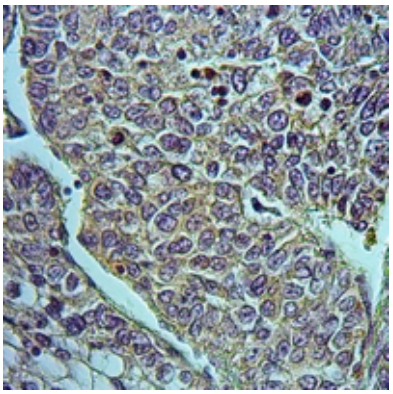
Name	HSD17B4 (HGNC:5213)
Synonyms	EDH17B4, SDR8C1
Function	Bifunctional enzyme acting on the peroxisomal fatty acid beta-oxidation pathway. Catalyzes two of the four reactions in fatty acid degradation: hydration of 2-enoyl-CoA (trans-2-enoyl-CoA) to produce (3R)-3-hydroxyacyl-CoA, and dehydrogenation 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

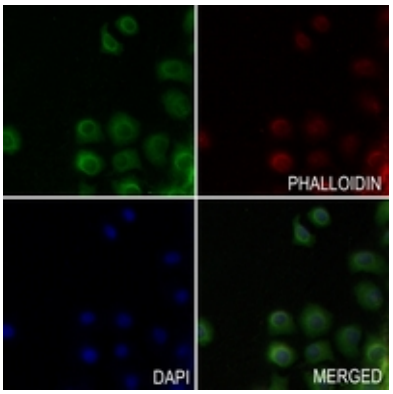
Images



Western blot analysis of HSD17B4 expression in HEK293T (A), H1688 (B), H1792 (C), mouse liver (D), rat liver (E) whole cell lysates. (Predicted band size: 79 kD; Observed band size: 90 kD)



Immunohistochemical analysis of HSD17B4 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.



Immunofluorescent analysis of HSD17B4 staining in SGC7901 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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