

# 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 Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB31274 Calculated MW 79686 341-370 **Antigen Region** 

#### **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.

**Cellular Location** Peroxisome.

**Tissue Location** Present in many tissues with highest concentrations in liver, heart, prostate

and testis

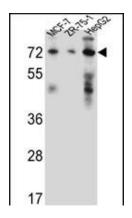
## **Background**

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

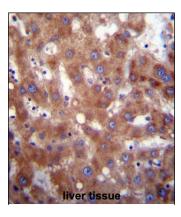
Canzian, F., et al. Hum. Mol. Genet. 19(19):3873-3884(2010) Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Kashiwayama, Y., et al. J. Biol. Chem. 285(34):26315-26325(2010) Pierce, S.B., et al. Am. J. Hum. Genet. 87(2):282-288(2010) Liu, C.Y., et al. Carcinogenesis 31(7):1259-1263(2010)

### **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'.