

# HSD17B8 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21740a

#### **Product Information**

**Application** WB, E **Primary Accession Q92506** Reactivity Human Host Rabbit Clonality polyclonal Isotype Rabbit IgG **Clone Names** RB48812 Calculated MW 26974

#### **Additional Information**

**Gene ID** 7923

Other Names Estradiol 17-beta-dehydrogenase 8, 17-beta-hydroxysteroid dehydrogenase 8,

17-beta-HSD 8, 3-oxoacyl-[acyl-carrier-protein] reductase, 111-, Protein Ke6,

Ke-6, Really interesting new gene 2 protein, Testosterone 17-beta-dehydrogenase 8, HSD17B8, FABGL, HKE6, RING2

**Target/Specificity** This HSD17B8 antibody is generated from a rabbit immunized with a KLH

conjugated synthetic peptide between 33-67 amino acids from the N-terminal

region of human HSD17B8.

**Dilution** WB~~1:2000 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** HSD17B8 Antibody (N-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

#### **Protein Information**

Name HSD17B8

**Synonyms** FABGL, HKE6, RING2, SDR30C1

**Function** Required for the solubility and assembly of the heterotetramer

3-ketoacyl-[acyl carrier protein] (ACP) reductase functional complex (KAR or KAR1) that forms part of the mitochondrial fatty acid synthase (mtFAS). Alpha-subunit of the KAR complex that acts as a scaffold protein required for the stability of carbonyl reductase type-4 (CBR4, beta-subunit of the KAR complex) and for its 3-ketoacyl- ACP reductase activity, thereby participating in mitochondrial fatty acid biosynthesis. Catalyzes the NAD-dependent conversion of (3R)-3- hydroxyacyl-CoA into 3-ketoacyl-CoA (3-oxoacyl-CoA) with no chain length preference; this enzymatic activity is not needed for the KAR function (PubMed: 19571038, PubMed: 25203508, PubMed: 30508570). Prefers (3R)-3-hydroxyacyl-CoA over (3S)-3-hydroxyacyl-CoA and displays enzymatic activity only in the presence of NAD(+) (PubMed: 19571038). Cooperates with enoyl-CoA hydratase 1 in mitochondria, together they constitute an alternative route to the auxiliary enzyme pathways for the breakdown of Z-PUFA (cis polyunsaturated fatty acid) enoyl-esters (Probable) (PubMed: 30508570). NAD-dependent 17-beta-hydroxysteroid dehydrogenase with highest activity towards estradiol (17beta-estradiol or E2). Has very low activity towards testosterone and dihydrotestosterone (17beta-hydroxy-5alpha-androstan-3-one). Primarily an oxidative enzyme, it can switch to a reductive mode determined in the appropriate physiologic milieu and catalyze the reduction of estrone (E1) to form biologically active 17beta-estradiol (PubMed: 17978863).

Cellular Location

Mitochondrion matrix

**Tissue Location** 

Widely expressed, particularly abundant in prostate, placenta and kidney (PubMed:17978863). Expressed at protein level in various tissues like brain, cerebellum, heart, lung, kidney, ovary, testis, adrenals and prostate (PubMed:30508570)

### **Background**

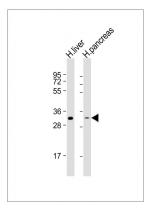
NAD-dependent 17-beta-hydroxysteroid dehydrogenase with highest activity towards estradiol. Has very low activity towards testosterone. The heteroteramer with CBR4 has NADH-dependent 3- ketoacyl-acyl carrier protein reductase activity. May play a role in biosynthesis of fatty acids in mitochondria.

#### References

Kalnine N., et al. Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases. Mungall A.J., et al. Nature 425:805-811(2003). Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Ando A., et al. Genomics 35:600-602(1996). Ohno S., et al. Mol. Cell. Biochem. 309:209-215(2008).

## **Images**

All lanes: Anti-HSD17B8 Antibody (N-term) at 1:2000 dilution Lane 1: human liver lysate Lane 2: human pancreas lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 27 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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