

## HSD17B8 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21740a

## Specification

## HSD17B8 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	<u>Q92506</u>
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	26974

## HSD17B8 Antibody (N-term) - 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

#### 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.

## HSD17B8 Antibody (N-term) - 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: <u>19571038</u>). 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)

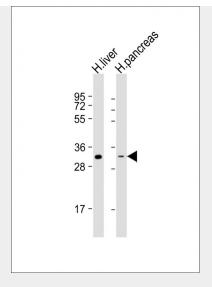
## HSD17B8 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

HSD17B8 Antibody (N-term) - 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  $\mu$ g 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.

# HSD17B8 Antibody (N-term) - 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 3ketoacyl-acyl carrier protein reductase activity. May play a role in biosynthesis of fatty acids in mitochondria.

# HSD17B8 Antibody (N-term) - 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).