

**Anti-HSD17B1 Antibody**  
Catalog # ABO10927**Specification****Anti-HSD17B1 Antibody - Product Information**

Application	ICC, WB, IHC
Primary Accession	<a href="#">P14061</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Estradiol 17-beta-dehydrogenase 1(HSD17B1) detection. Tested with WB, IHC-P, ICC in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-HSD17B1 Antibody - Additional Information**

Gene ID 3292

**Other Names**

Estradiol 17-beta-dehydrogenase 1, 1.1.1.62, 17-beta-hydroxysteroid dehydrogenase type 1, 17-beta-HSD 1, 20 alpha-hydroxysteroid dehydrogenase, 20-alpha-HSD, E2DH, Placental 17-beta-hydroxysteroid dehydrogenase, Short chain dehydrogenase/reductase family 28C member 1, HSD17B1, E17KSR, EDH17B1, EDH17B2, EDHB17, SDR28C1

**Calculated MW**

34950 MW KDa

**Application Details**

Immunocytochemistry , 0.5-1 µg/ml, Human, Mouse,  
Rat<br>Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By  
Heat<br>Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse<br>

**Subcellular Localization**

Cytoplasm.

**Protein Name**

Estradiol 17-beta-dehydrogenase 1

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg Na<sub>3</sub>N.

**Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human HSD17B1(29-43aa QSFKVVYATLRDLKTQ), different from the related rat and mouse sequences by one amino acid.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Sequence Similarities**

Belongs to the short-chain dehydrogenases/reductases (SDR) family.

**Anti-HSD17B1 Antibody - Protein Information**

**Name** HSD17B1 ([HGNC:5210](#))

**Function**

Favors the reduction of estrogens and androgens. Converts estrone (E1) to a more potent estrogen, 17beta-estradiol (E2) (PubMed:<a href="http://www.uniprot.org/citations/8994190" target="\_blank">8994190</a>). Also has 20-alpha-HSD activity. Uses preferentially NADH.

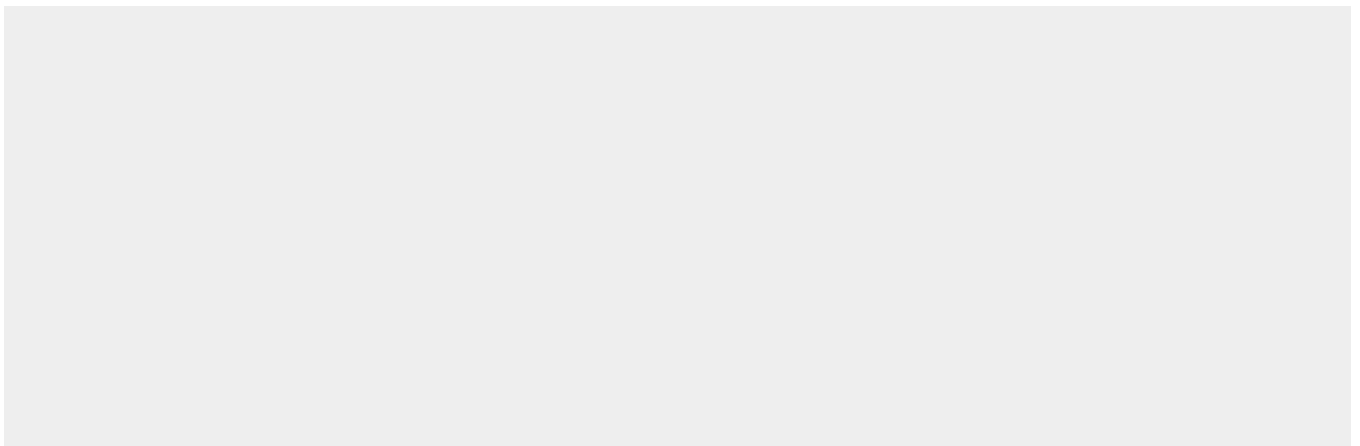
**Cellular Location**

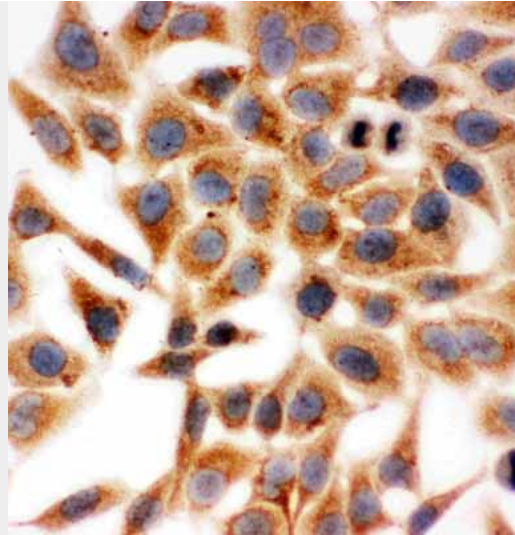
Cytoplasm.

**Anti-HSD17B1 Antibody - Protocols**

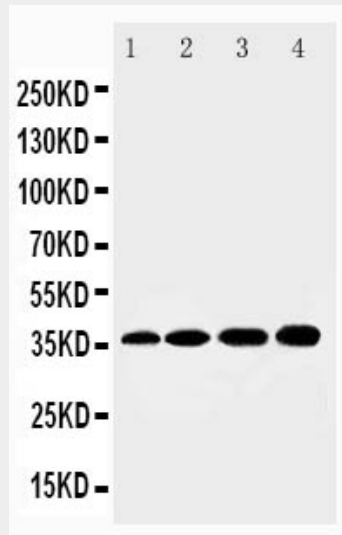
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

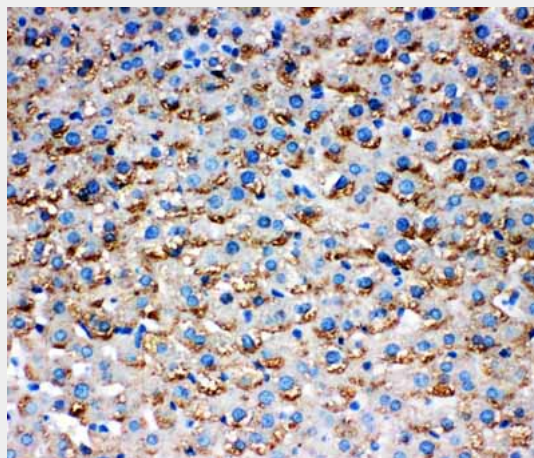
**Anti-HSD17B1 Antibody - Images**



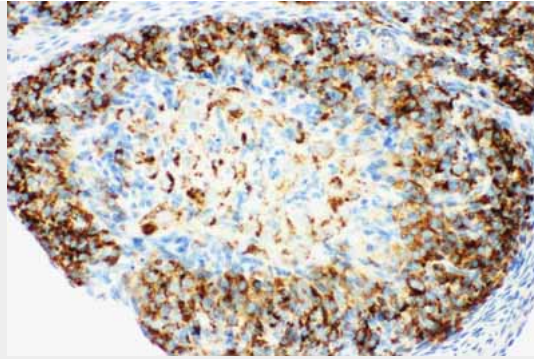
Anti-HSD17B1 antibody, ABO10927, ICCICC: HELA Cell



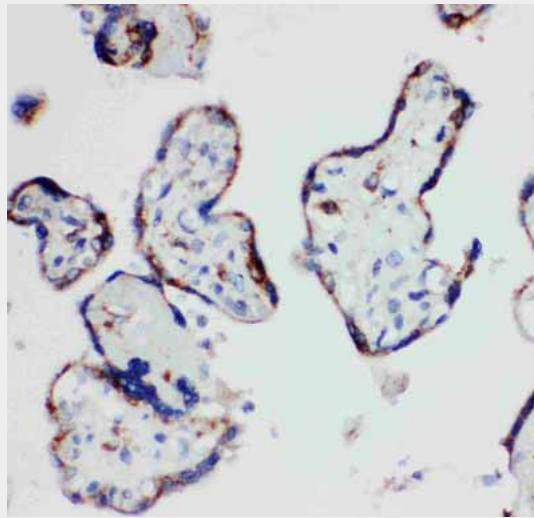
Anti-HSD17B1 antibody, ABO10927, Western blotting Lane 1: Rat Kidney Tissue Lysate Lane 2: Rat Liver Tissue Lysate Lane 3: 293T Cell Lysate Lane 4: HELA Cell Lysate



Anti-HSD17B1 antibody, ABO10927, IHC(P) IHC(P): Rat Liver Tissue



Anti-HSD17B1 antibody, ABO10927, IHC(P)IHC(P): Rat Ovary Tissue



Anti-HSD17B1 antibody, ABO10927, IHC(P)IHC(P): Human Placenta Tissue

#### **Anti-HSD17B1 Antibody - Background**

Estradiol 17-beta-dehydrogenase 1 is an enzyme that in humans is encoded by the HSD17B1 gene. This gene encodes a member of the 17beta-hydroxysteroid dehydrogenase family of short-chain dehydrogenases/reductases. It has a dual function in estrogen activation and androgen inactivation and plays a major role in establishing the estrogen E2 concentration gradient between serum and peripheral tissues. The encoded protein catalyzes the last step in estrogen activation, using NADPH to convert estrogens E1 and E2 and androgens like 4-androstenedione, to testosterone. It has an N-terminal short-chain dehydrogenase domain with a cofactor binding site, and a narrow, hydrophobic C-terminal domain with a steroid substrate binding site. This gene is expressed primarily in the placenta and ovarian granulosa cells, and to a lesser extent, in the endometrium, adipose tissue, and prostate. Polymorphisms in this gene have been linked to breast and prostate cancer. A pseudogene of this gene has been identified. Alternative splicing results in multiple transcript variants.