10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-HSD17B1 Antibody
Catalog # ABO10927

Specification

Anti-HSD17B1 Antibody - Product Information

Application	**WB, IHC-P, ICC**
Primary Accession	P14061
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
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization
Cytoplasm.

Protein Name
Estradiol 17-beta-dehydrogenase 1

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the N-terminus of human HSD17B1(29-43aa QSFKVYATLRDLKTQ), 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 r˚Constitution, 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:8994190). Also has 20-alpha-HSD activity. Uses preferentially NADH.

Cellular Location
Cytoplasm.

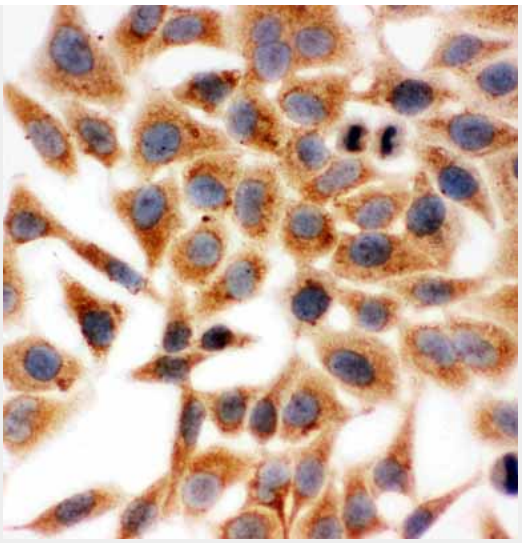
Anti-HSD17B1 Antibody - Protocols

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

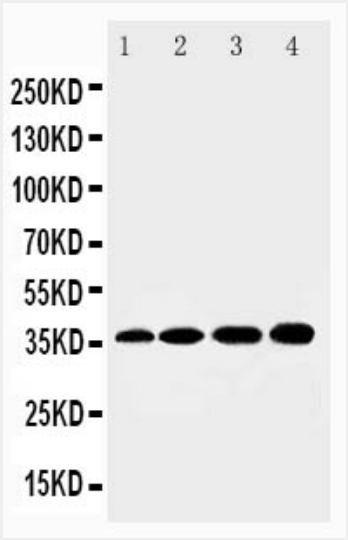
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-HSD17B1 Antibody - Images

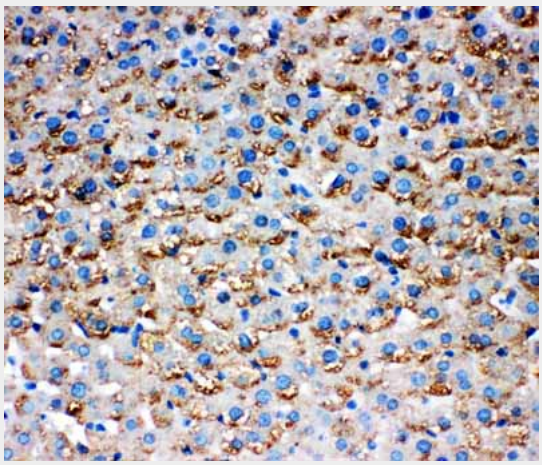
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Anti-HSD17B1 antibody, ABO10927, ICCICC: HELA Cell

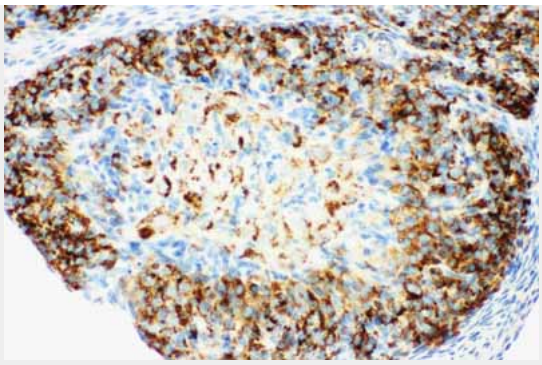


Anti-HSD17B1 antibody, ABO10927, Western blottingLane 1: Rat Kidney Tissue LysateLane 2: Rat Liver Tissue LysateLane 3: 293T Cell LysateLane 4: HELA Cell Lysate

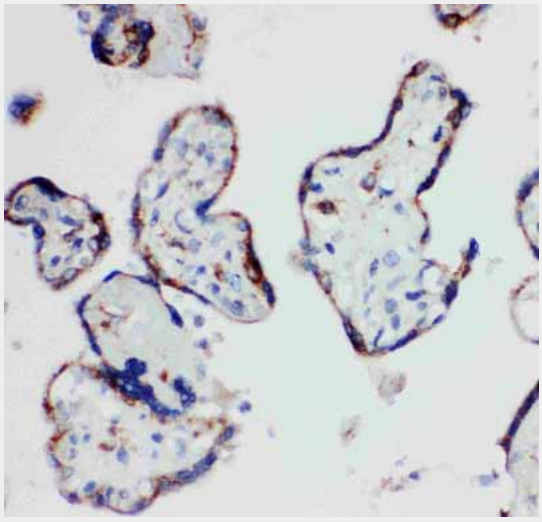


Anti-HSD17B1 antibody, ABO10927, IHC(P)IHC(P): Rat Liver Tissue

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



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.