

Anti-HSD17B1 Antibody

Catalog # ABO10927

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.

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
Application Details	Immunocytochemistry , 0.5-1 μ g/ml, Human, Mouse, Rat Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, Rat, Mouse, By Heat Western blot, 0.1-0.5 μ g/ml, Human, Rat, Mouse
Subcellular Localization	Cytoplasm.
Source	Eukaryota
Protein Name	Estradiol 17-beta-dehydrogenase 1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg Na ₃ .
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.

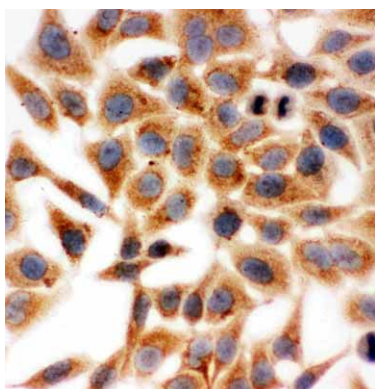
Protein Information

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.

Background

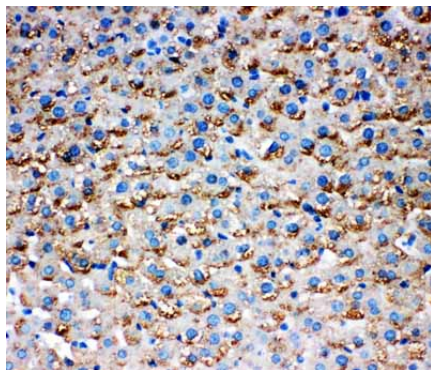
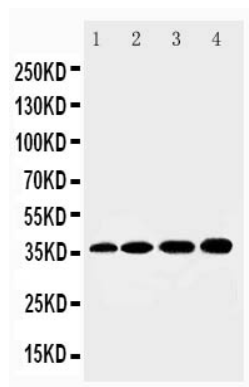
Estradiol 17-beta-dehydrogenase 1 is an enzyme that in humans is encoded by the HSD17B1 gene. This gene encodes a member of the 17beta-hydroxysteroid dehydrogenase family of short-chain dehydrogenases/reductases. It has a dual function in estrogen activation and androgen inactivation and plays a major 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.

Images

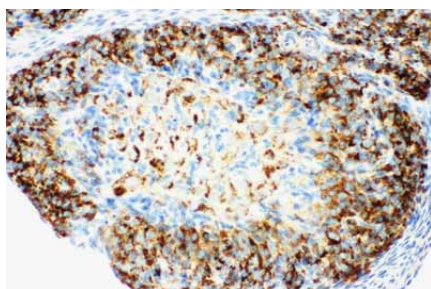


Anti-HSD17B1 antibody, ABO10927, ICCICC: HELA Cell

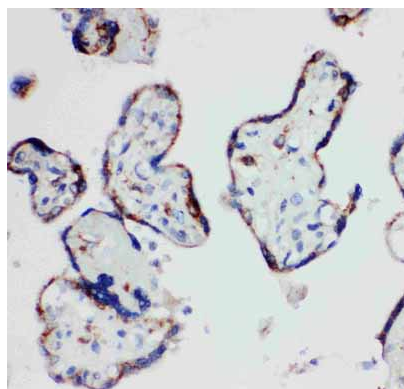
Anti-HSD17B1 antibody, ABO10927, Western blotting
 Lane 1: Rat Kidney Tissue Lysate
 Lane 2: Rat Liver Tissue Lysate
 Lane 3: 293T Cell Lysate
 Lane 4: HELA Cell Lysate



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

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