

**Anti-HSD17B2 Antibody**  
Catalog # ABO10918**Specification****Anti-HSD17B2 Antibody - Product Information**

Application	<b>WB, IHC</b>
Primary Accession	<a href="#">P37059</a>
Host	<b>Rabbit</b>
Reactivity	<b>Human</b>
Clonality	<b>Polyclonal</b>
Format	<b>Lyophilized</b>

**Description**

Rabbit IgG polyclonal antibody for Estradiol 17-beta-dehydrogenase 2(HSD17B2) detection. Tested with WB, IHC-P, IHC-F in Human.

**Reconstitution**

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

**Anti-HSD17B2 Antibody - Additional Information**

**Gene ID** 3294

**Other Names**

Estradiol 17-beta-dehydrogenase 2, 1.1.1.62, 17-beta-hydroxysteroid dehydrogenase type 2, 17-beta-HSD 2, 20 alpha-hydroxysteroid dehydrogenase, 20-alpha-HSD, E2DH, Microsomal 17-beta-hydroxysteroid dehydrogenase, Short chain dehydrogenase/reductase family 9C member 2, Testosterone 17-beta-dehydrogenase, 1.1.1.239, HSD17B2, EDH17B2, SDR9C2

**Calculated MW**

42785 MW KDa

**Application Details**

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

**Subcellular Localization**

Membrane ; Single-pass type II membrane protein .

**Protein Name**

Estradiol 17-beta-dehydrogenase 2

**Contents**

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

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human HSD17B2(373-387aa MPRALRMPNYKKKAT).

**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-HSD17B2 Antibody - Protein Information**

**Name** HSD17B2 ([HGNC:5211](#))

**Synonyms** EDH17B2, SDR9C2

**Function**

Catalyzes the NAD-dependent oxidation of the highly active 17beta-hydroxysteroids, such as estradiol (E2), testosterone (T), and dihydrotestosterone (DHT), to their less active forms and thus regulates the biological potency of these steroids. Oxidizes estradiol to estrone, testosterone to androstenedione, and dihydrotestosterone to 5alpha-androstan-3,17-dione. Also has 20-alpha-HSD activity.

**Cellular Location**

Endoplasmic reticulum membrane; Single-pass type II membrane protein

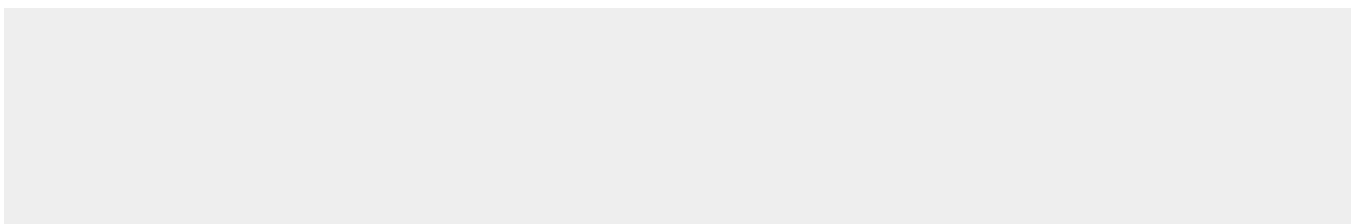
**Tissue Location**

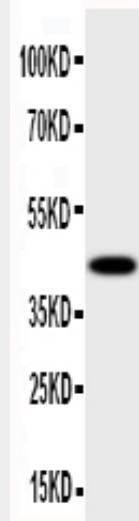
Expressed in placenta.

**Anti-HSD17B2 Antibody - Protocols**

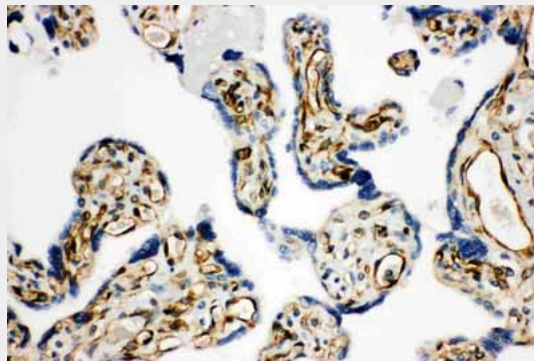
Provided below are standard protocols that you may find useful for product applications.

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

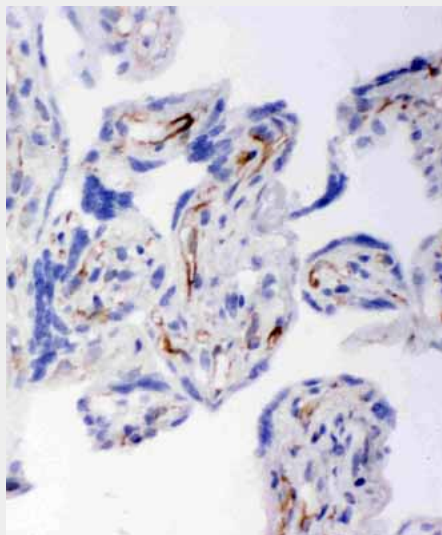
**Anti-HSD17B2 Antibody - Images**



Anti-HSD17B2 antibody, ABO10918, Western blotting All lanes: Anti HSD17B2 (ABO10918) at 0.5ug/ml WB: Human Placenta Tissue Lysate at 50ug Predicted bind size: 43KD Observed bind size: 43KD



Anti-HSD17B2 antibody, ABO10918, IHC(P) IHC(P): Human Placenta Tissue



Anti-HSD17B2 antibody, ABO10918, IHC(F) IHC(F): Human Placenta Tissue

### **Anti-HSD17B2 Antibody - Background**

HSD17B2(17-BETA-HYDROXYSTEROID DEHYDROGENASE II), also called 17-BETA-HSD II, is an enzyme which have 387 amino acids with a predicted molecular weight of 42,782 and associate

with the membranes of the endoplasmic reticulum. Its Cytogenetic location is 16q23.3. The type 2 enzyme was capable of catalyzing the interconversion of testosterone and androstenedione, as well as estradiol and estrone. HSD17B2 mRNA was detected in 18 of 42(43%) adenomas but not in prolactinomas. In the human endometrium, inactivation of 17-beta-estradiol to estrone is catalyzed by HSD17B2. And HSD17B2 activity distinguishing between disease-free and diseased endometria. HSD17B2 efficiently catalyzes the oxidative metabolism of androgens and estrogens, and it is expressed in a large series of human peripheral tissues. The previous paradigm that HSD17B2 activity in the endometrium is elevated during the secretory phase is confined to diseased endometrium but not to disease-free endometrium.