

Anti-HSD17B2 Antibody Picoband™

Catalog Number: A02506

About HSD17B2

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

Overview

Product Name	Anti-HSD17B2 Antibody Picoband™
Reactive Species	Human
Description	Boster Bio Anti-HSD17B2 Antibody Picoband™ catalog # A02506. Tested in Flow Cytometry, WB applications. This antibody reacts with Human.
Application	Flow Cytometry, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P37059

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human HSD17B2.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.25-0.5ug/ml, Human Flow Cytometry, 1-3ug/1x10⁶ cells, Human

Anti-HSD17B2 Antibody Picoband™ (A02506) Images

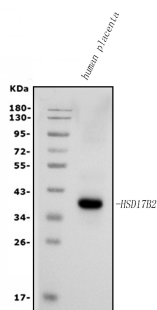


Figure 1. Western blot analysis of HSD17B2 using anti-HSD17B2 antibody (A02506).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: human placenta tissue lysates.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-HSD17B2 antigen affinity purified polyclonal antibody (Catalog # A02506) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for HSD17B2 at approximately 40KD. The expected band size for HSD17B2 is at 40KD.

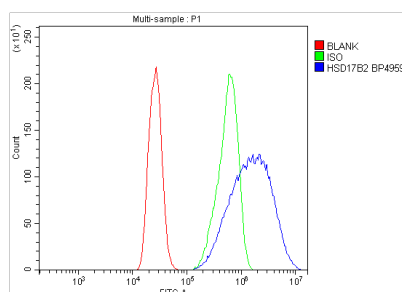


Figure 2. Flow Cytometry analysis of CACO-2 cells using anti-HSD17B2 antibody (A02506).

Overlay histogram showing CACO-2 cells stained with A02506 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-HSD17B2 Antibody (A02506, 1ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

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