

HSD17B7 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6760a

Product Information

Application WB, FC, E **Primary Accession** P56937 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB20463 **Calculated MW** 38206 **Antigen Region** 57-85

Additional Information

Gene ID 51478

Other Names 3-keto-steroid reductase, 17-beta-hydroxysteroid dehydrogenase 7,

17-beta-HSD 7, Estradiol 17-beta-dehydrogenase 7, HSD17B7

Target/Specificity This HSD17B7 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 57-85 amino acids from the N-terminal

region of human HSD17B7.

Dilution WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation

followed by dialysis against PBS.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions HSD17B7 Antibody (N-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

Protein Information

Name HSD17B7

Synonyms 17HSD7 {ECO:0000303 | PubMed:12732193}, SD

Function Bifunctional enzyme involved in steroid-hormone metabolism and

cholesterol biosynthesis (PubMed: 11165030, PubMed: 12574203,

PubMed:<u>12732193</u>, PubMed:<u>12829805</u>, PubMed:<u>19772289</u>, PubMed:<u>20659585</u>). Catalyzes the NADP(H)-dependent reduction of estrogens and androgens and regulates the biological potency of these steroids. Converts estrone (E1) to a more potent estrogen, 17beta-estradiol (E2) (PubMed:<u>12574203</u>, PubMed:<u>12732193</u>, PubMed:<u>19772289</u>). Converts dihydrotestosterone (DHT) to its inactive form 5a-androstane-3b,17b- diol (PubMed:<u>12574203</u>, PubMed:<u>12732193</u>, PubMed:<u>19772289</u>). Converts moderately progesterone to 3beta-hydroxypregn-4-ene-20-one, leading to its inactivation (PubMed:<u>12574203</u>, PubMed:<u>12732193</u>). Additionally, participates in the post-squalene cholesterol biosynthesis, as a 3- ketosteroid reductase (PubMed:<u>11165030</u>, PubMed:<u>12829805</u>, PubMed:<u>20659585</u>).

Cellular Location

Endoplasmic reticulum membrane; Single-pass membrane protein

Tissue Location

Highly expressed in adrenal gland, liver, lung and thymus. Expressed in breast, ovaries, pituitary gland, pregnant uterus, prostate, kidney, lymph node, small intestine, spinal cord and trachea Weakly expressed in all other tissues tested

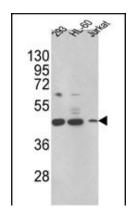
Background

HSD17B7 oxidizes or reduces estrogens and androgens in mammals and regulates the biologic potency of these steroids.

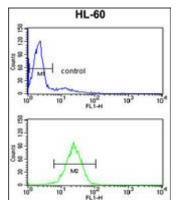
References

Plourde, M., et.al., J. Steroid Biochem. Mol. Biol. 116 (3-5), 134-153 (2009)

Images



Western blot analysis of HSD17B7 Antibody (N-term) (Cat. #AP6760a) in 293,HL-60,Jurkat cell line lysates (35ug/lane). HSD17B7 (arrow) was detected using the purified Pab.(2ug/ml)



HSD17B7 Antibody (N-term) (Cat. #AP6760a) flow cytometry analysis of HL-60 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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