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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:12732193, PubMed:12829805, PubMed:19772289, PubMed:20659585). 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:12574203, PubMed:12732193, PubMed:19772289). Converts dihydrotestosterone (DHT) to its inactive form 5a-androstane-3b,17b- diol (PubMed:12574203, PubMed:12732193, PubMed:19772289). Converts moderately progesterone to 3beta-hydroxypregn-4-ene-20-one, leading to its inactivation (PubMed:12574203, PubMed:12732193). Additionally, participates in the post-squalene cholesterol biosynthesis, as a 3- ketosteroid reductase (PubMed:11165030, PubMed:12829805, PubMed:20659585).

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

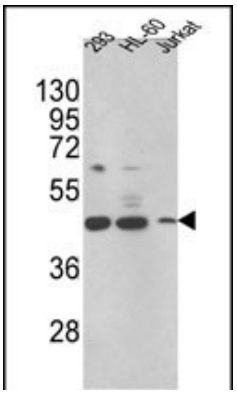
Background

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

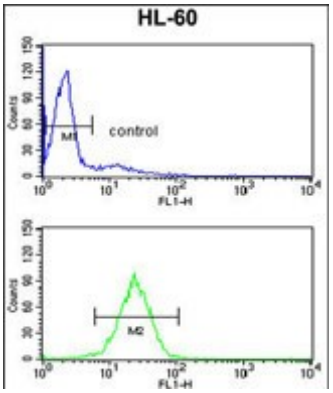
References

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.