

# HSD17B7 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6760a

## Specification

## HSD17B7 Antibody (N-term) - Product Information

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

## HSD17B7 Antibody (N-term) - 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

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.

## HSD17B7 Antibody (N-term) - Protein Information

Name HSD17B7

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



**Function** Bifunctional enzyme involved in steroid-hormone metabolism and cholesterol biosynthesis (PubMed:<u>11165030</u>, PubMed:<u>12574203</u>, 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>12574203</u>, 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

## HSD17B7 Antibody (N-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### HSD17B7 Antibody (N-term) - 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.

## HSD17B7 Antibody (N-term) - Background

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

## HSD17B7 Antibody (N-term) - References

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