

## **HSD17B3 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9515c

# **Specification**

## **HSD17B3** Antibody (Center) - Product Information

Application WB, IHC-P, FC,E

Primary Accession
Reactivity
Host
Clonality
Isotype
Calculated MW
Antigen Region
Reactivity
Human
Rabbit
Polyclonal
Rabbit IgG
34516
89-118

## **HSD17B3** Antibody (Center) - Additional Information

### **Gene ID 3293**

## **Other Names**

Testosterone 17-beta-dehydrogenase 3, 17-beta-hydroxysteroid dehydrogenase type 3, 17-beta-HSD 3, Testicular 17-beta-hydroxysteroid dehydrogenase, HSD17B3, EDH17B3

### Target/Specificity

This HSD17B3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 89-118 amino acids from the Central region of human HSD17B3.

# **Dilution**

WB~~1:1000 IHC-P~~1:10~50 FC~~1:10~50

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### 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**

HSD17B3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# **HSD17B3** Antibody (Center) - Protein Information

Name HSD17B3 (HGNC:5212)



# Synonyms EDH17B3, SDR12C2

**Function** Catalyzes the conversion of 17-oxosteroids to 17beta- hydroxysteroids (PubMed:8075637, PubMed:16216911, PubMed:27927697, PubMed:26545797). Favors the reduction of androstenedione to testosterone (PubMed:16216911, PubMed:27927697, PubMed:26545797). Testosterone is the key androgen driving male development and function (PubMed:8075637). Uses NADPH while the two other EDH17B enzymes use NADH (PubMed:26545797, PubMed:8075637, PubMed:16216911). Androgens such as epiandrosterone, dehydroepiandrosterone, androsterone and androstanedione are accepted as substrates and reduced at C-17 (PubMed:16216911). Can reduce 11-ketoandrostenedione as well as 11beta-hydroxyandrostenedione at C-17 to the respective testosterone forms (PubMed:16216911, PubMed:27927697).

**Cellular Location** Endoplasmic reticulum

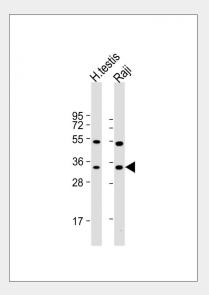
**Tissue Location** Testis..

## **HSD17B3 Antibody (Center) - Protocols**

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

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

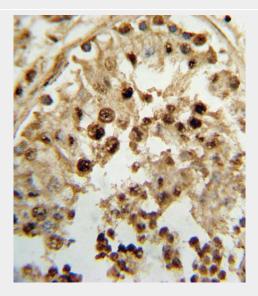
## **HSD17B3** Antibody (Center) - Images



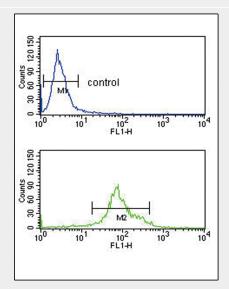
All lanes: Anti-HSD17B3 Antibody (Center) at 1:1000 dilution Lane 1: human testis lysate Lane 2: Raji whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 35 kDa Blocking/Dilution buffer:



## 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human testis tissue reacted with HSD17B3 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



HSD17B3 Antibody (Center) (Cat. #AP9515c) flow cytometry analysis of K562 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# **HSD17B3** Antibody (Center) - Background

This isoform of 17 beta-hydroxysteroid dehydrogenase is expressed predominantly in the testis and catalyzes the conversion of androstenedione to testosterone. It preferentially uses NADP as cofactor. Deficiency can result in male pseudohermaphroditism with gynecomastia.

## **HSD17B3** Antibody (Center) - References

Li, J., et al. Breast Cancer Res. 12 (2), R19 (2010): Sata, F., et al. J Sex Med (2010) In press: Ahn, J., et al. Hum. Mol. Genet. 18(19):3749-3757(2009) Chakrabarti, B., et al. Autism Res 2(3):157-177(2009)





Beuten, J., et al. Cancer Epidemiol. Biomarkers Prev. 18(6):1869-1880(2009) Andersson, S., et al. J. Clin. Endocrinol. Metab. 81(1):130-136(1996)