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HSD17B3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9515c

Product Information

Application	IHC-P, FC, WB, E
Primary Accession	P37058
Reactivity	Human
Predicted	Mouse, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB24061
Calculated MW	34516
Antigen Region	89-118

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	IHC-P~~1:100~500 FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
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.

Protein Information

Name	HSD17B3 (HGNC:5212)
Synonyms	EDH17B3, SDR12C2

Function	Catalyzes the conversion of 17-oxosteroids to 17beta- hydroxysteroids (PubMed:16216911, PubMed:23856005, PubMed:26545797, PubMed:27927697, PubMed:8075637). Favors the reduction of androstenedione to testosterone (PubMed:16216911, PubMed:23856005, PubMed:26545797, PubMed:27927697). Testosterone is the key androgen driving male development and function (PubMed:8075637). Uses NADPH while the two other EDH17B enzymes use NADH (PubMed:16216911, PubMed:26545797, PubMed:8075637). 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..

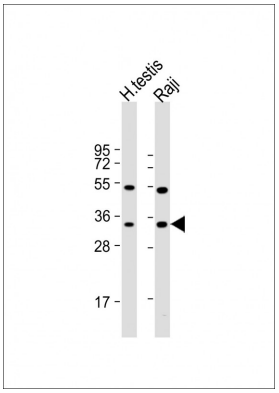
Background

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.

References

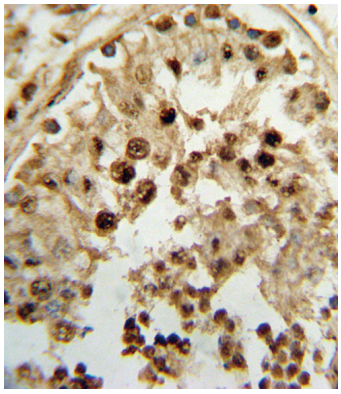
Li, J., et al. Breast Cancer Res. 12 (2), R19 (2010) :
Sata, F., et al. J Sex Med (2010) In press :
Ahn, J., et al. Hum. Mol. Genet. 18(19):3749-3757(2009)
Chakrabarti, B., et al. Autism Res 2(3):157-177(2009)
Beuten, J., et al. Cancer Epidemiol. Biomarkers Prev. 18(6):1869-1880(2009)
Andersson, S., et al. J. Clin. Endocrinol. Metab. 81(1):130-136(1996)

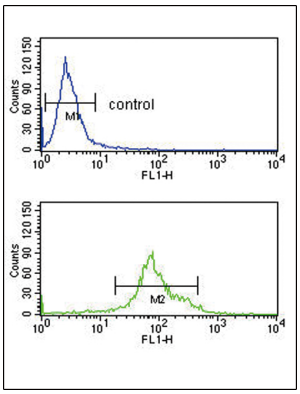
Images



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.

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