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SRD5A1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22197c

Product Information

Application	WB, E
Primary Accession	P18405
Other Accession	Q28891
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB55221
Calculated MW	29459

Additional Information

Gene ID	6715
Other Names	3-oxo-5-alpha-steroid 4-dehydrogenase 1, 1.3.1.22, SR type 1, Steroid 5-alpha-reductase 1, S5AR 1, SRD5A1
Target/Specificity	This SRD5A1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 153-184 amino acids from the Central region of human SRD5A1.
Dilution	WB~~1:8000 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	SRD5A1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SRD5A1 (HGNC:11284)
Function	Catalyzes the irreversible stereospecific reduction of the delta 4,5 bond (double bond between carbons 4 and 5) of various 3-oxo steroids (3-keto steroids) producing their 5alpha dihydro-3-oxo forms (PubMed:2339109,

PubMed:23685396). Converts testosterone into 5-alpha- dihydrotestosterone (DHT), a more potent androgen as it is the preferred ligand for androgen receptor (AR) transactivation, making this reaction a key step in male sexual differentiation during development (PubMed:2339109, PubMed:23685396). Besides testosterone, it can also act on other steroids, including progesterone, androstenedione, and corticoids, producing metabolites with diverse roles (PubMed:2339109). Hence, it plays a central role in sexual differentiation and androgen physiology (PubMed:2339109).

Cellular Location Microsome membrane; Multi-pass membrane protein. Endoplasmic reticulum membrane; Multi-pass membrane protein

Tissue Location Liver and prostate (at a low level).

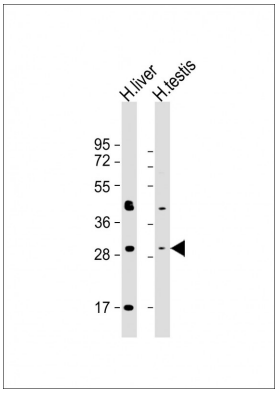
Background

Converts testosterone into 5-alpha-dihydrotestosterone and progesterone or corticosterone into their corresponding 5- alpha-3-oxosteroids. It plays a central role in sexual differentiation and androgen physiology.

References

Andersson S.,et al.Proc. Natl. Acad. Sci. U.S.A. 87:3640-3644(1990).
Jenkins E.P.,et al.Genomics 11:1102-1112(1991).
Yu W.,et al.Submitted (MAR-1998) to the EMBL/GenBank/DDBJ databases.
Hu R.-M.,et al.Proc. Natl. Acad. Sci. U.S.A. 97:9543-9548(2000).
Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.

Images



All lanes : Anti-SRD5A1 Antibody (Center) at 1:8000 dilution Lane 1: human liver lysate Lane 2: human testis lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 29 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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