

Rabbit SRD5A1 Polyclonal Antibody | anti-SRD5A1 antibody

Anti-SRD5A1 Antibody

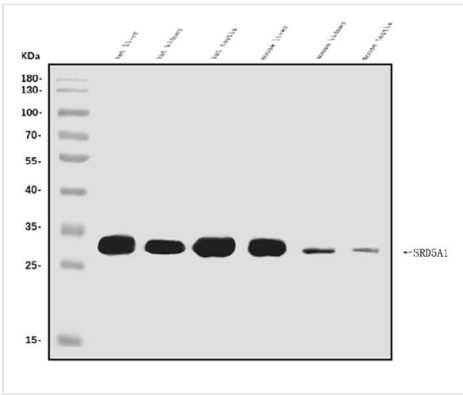
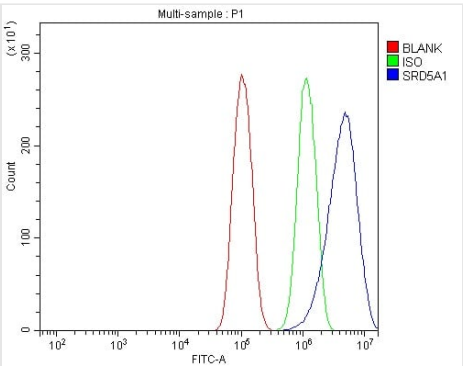
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125694	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Western Blot

PRODUCT SYNONYMS

SRD5A1; Polyclonal Antibody; Anti-SRD5A1 Antibody; 3-oxo-5-alpha-steroid 4-dehydrogenase 1; EC 1. 3. 1. 22; SR type 1; Steroid 5-alpha-reductase 1; S5AR 1; steroid 5 alpha-reductase 1; anti-SRD5A1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for SRD5A1 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.
Applicable Applications for anti-SRD5A1 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	E Coli-derived human SRD5A1 recombinant protein (Position: Y38-R251).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of PC-3 cells using anti-SRD5A1 antibody (AAA125694).Overlay histogram showing PC-3 cells stained with AAA125694 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-SRD5A1 Antibody (AAA125694, 1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

WB (Western Blot)

Figure 1. Western blot analysis of SRD5A1 using anti-SRD5A1 antibody (AAA125694).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30ug of sample under reducing conditions.Lane 1: rat liver tissue lysatesLane 2: rat kidney tissue lysatesLane 3: rat testis tissue lysatesLane 4: mouse liver tissue lysatesLane 5: mouse kidney tissue lysatesLane 6: mouse testis tissue lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with rabbit anti-SRD5A1 antigen affinity purified polyclonal antibody (Catalog # AAA125694) at 0. 25 μg/mL overnight at 4 degree C, then washed with TBS-0. 1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for SRD5A1 at approximately 29KD. The expected band size for SRD5A1 is at 29KD.

ADDITIONAL INFORMATION

Related Product Information for anti-SRD5A1 antibody	3-oxo-5alpha-steroid 4-dehydrogenase 1 is an enzyme that in humans is encoded by the SRD5A1 gene. It is one of three forms of steroid 5alpha-reductase. The 3-oxo-5alpha-steroid 4-dehydrogenase 1 enzyme is involved in bile acid biosynthesis, androgen and estrogen metabolism. For instance, the enzyme catalyzes the conversion of testosterone into the more potent androgen, 5alpha-dihydrotestosterone. It can also catalyze the conversion of progesterone, corticosterone or other steroids, to its corresponding 5alpha-3-oxo-steroids. This chemical reaction is called 5alpha-reduction, i. e. the reduction of the delta5-4 double bond in steroids by catalyzing direct hydride transfer from NADPH to the carbon 5 position of the steroid substrate.
References	- Andersson, S., Russell, D. W. Structural and biochemical properties of cloned and expressed human and rat steroid 5-alpha-reductases. Proc. Nat. Acad. Sci. 87: 3640-3644, 1990. - Cantagrel, V., Lefeber, D. J., Ng, B. G., Guan, Z., Silhavy, J. L., Bielas, S. L., Lehle, L., Hombauer, H., Adamowicz, M., Swiezewska, E., De Brouwer, A. P., Blumel, P., and 13 others. SRD5A3 is required for converting polyprenol to dolichol and is mutated in a congenital glycosylation disorder. Cell 142: 203-217, 2010. - Ellis, J. A., Stebbing, M., Harrap, S. B. Genetic analysis of male pattern baldness and the 5-alpha-reductase genes. J. Invest. Derm. 110: 849-853, 1998.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4507201
NCBI GeneID	6715
NCBI Accession #	NP_001038.1
NCBI GenBank Nucleotide #	NM_001047.2
UniProt Accession #	P18405; Q9UHY4; Q9UP36; Q9UP37; B2R7Q1
Molecular Weight	29,459 Da
NCBI Official Full Name	3-oxo-5-alpha-steroid 4-dehydrogenase 1

NCBI Official Synonym Full Names	steroid-5-alpha-reductase, alpha polypeptide 1 (3-oxo-5 alpha-steroid delta 4-dehydrogenase alpha 1)
NCBI Official Symbol	SRD5A1
NCBI Official Synonym Symbols	S5AR 1
NCBI Protein Information	3-oxo-5-alpha-steroid 4-dehydrogenase 1; SR type 1; 5-alpha reductase; steroid 5-alpha-reductase 1; steroid 5-alpha-reductase type I; 3-oxo-5 alpha-steroid delta 4-dehydrogenase alpha 1
UniProt Protein Name	3-oxo-5-alpha-steroid 4-dehydrogenase 1
UniProt Gene Name	SRD5A1
UniProt Synonym Gene Names	S5AR 1
UniProt Entry Name	S5A1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/srd5a1-antibody-direct-elisa-flow-cytometry-western-blot-elisa/125694>