

## Anti-SRD5A1 Antibody Picoband®

Catalog Number: A03464-2

### About SRD5A1

3-oxo-5 $\alpha$ -steroid 4-dehydrogenase 1 is an enzyme that in humans is encoded by the SRD5A1 gene. It is one of three forms of steroid 5 $\alpha$ -reductase. The 3-oxo-5 $\alpha$ -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, 5 $\alpha$ -dihydrotestosterone. It can also catalyze the conversion of progesterone, corticosterone or other steroids, to its corresponding 5 $\alpha$ -3-oxo-steroids. This chemical reaction is called 5 $\alpha$ -reduction, i.e. the reduction of the  $\Delta^5$ -4 double bond in steroids by catalyzing direct hydride transfer from NADPH to the carbon 5 position of the steroid substrate.

### Overview

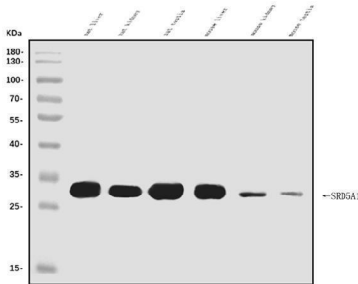
Product Name	Anti-SRD5A1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-SRD5A1 Antibody Picoband® catalog # A03464-2. Tested in ELISA, Flow Cytometry, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, Flow Cytometry, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na <sub>2</sub> HPO <sub>4</sub> .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P18405

### Technical Details

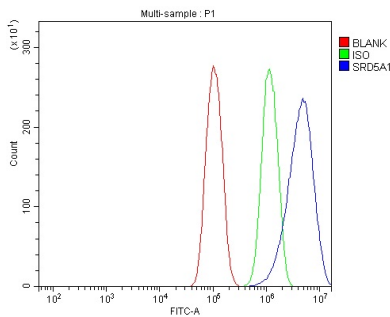
Immunogen	E.coli-derived human SRD5A1 recombinant protein (Position: Y38-R251).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.25ug/ml, Mouse, Rat Flow Cytometry (Fixed), 1-3ug/1x10 <sup>6</sup> cells, Human, Rat ELISA, 0.1-0.5ug/ml, -

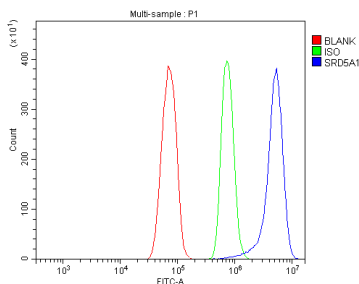
## Anti-SRD5A1 Antibody Picoband® (A03464-2) Images



Western blot analysis of SRD5A1 using anti-SRD5A1 antibody (A03464-2). 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 lysates, Lane 2: rat kidney tissue lysates, Lane 3: rat testis tissue lysates, Lane 4: mouse liver tissue lysates, Lane 5: mouse kidney tissue lysates, Lane 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 # A03464-2) at 0.25 ug/mL overnight at 4°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 (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for SRD5A1 at approximately 29KD. The expected band size for SRD5A1 is at 29KD.



Flow Cytometry analysis of PC-3 cells using anti-SRD5A1 antibody (A03464-2). Overlay histogram showing PC-3 cells stained with A03464-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-SRD5A1 Antibody (A03464-2, 1ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



Flow Cytometry analysis of RH35 cells using anti-SRD5A1 antibody (A03464-2). Overlay histogram showing RH35 cells stained with A03464-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-SRD5A1 Antibody (A03464-2, 1 ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

## Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



### Anti-SRD5A1 Antibody

For Research Use Only. Not for use in diagnostic procedures.