10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-SRD5A2 Rabbit Monoclonal Antibody

Catalog # ABO15870

Product Information

Application	WB, IP
Primary Accession	P31213
Host	Rabbit
Isotype	IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-SRD5A2 Rabbit Monoclonal Antibody . Tested in WB, IP applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

Gene ID	6716
Other Names	3-oxo-5-alpha-steroid 4-dehydrogenase 2, 1.3.1.22, 5 alpha-SR2, SR type 2, Steroid 5-alpha-reductase 2, S5AR 2, Type II 5-alpha reductase, SRD5A2
Calculated MW	28407
Application Details	WB 1:500-1:2000 IP 1:50
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: 24S47
Immunogen	A synthesized peptide derived from human SRD5A2
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	SRD5A2
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:10898110, PubMed:23685396). Converts testosterone into 5-alpha- dihydrotestosterone

(DHT), the most active androgen in the prostate, as it is the preferred ligand for androgen receptor (AR) transactivation, making this reaction a key step in male sexual differentiation during development (PubMed:10898110, PubMed:23685396). Besides testosterone, it can also act on other steroids, including progesterone, producing metabolites with diverse roles (PubMed:10898110). Hence, it plays a central role in sexual differentiation and androgen physiology (PubMed:10898110).

Cellular Location

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

Tissue Location

Expressed in high levels in the prostate and many other androgen-sensitive tissues

Images

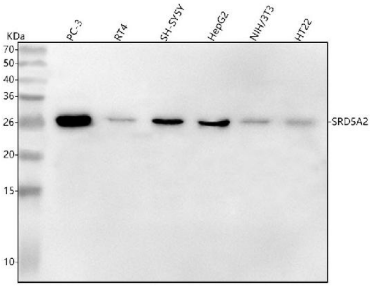


Figure 1. Western blot analysis of SRD5A2 using anti-SRD5A2 antibody (M00704).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human PC-3 whole cell lysates,
Lane 2: human RT4 whole cell lysates,
Lane 3: human SH-SY5Y whole cell lysates,
Lane 4: human HepG2 whole cell lysates,
Lane 5: human NIH/3T3 whole cell lysates,
Lane 6: mouse HT22 whole cell lysates.
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-SRD5A2 antigen affinity purified monoclonal antibody (Catalog # M00704) at 1:500 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 1:500 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 SRD5A2 at approximately 28 kDa. The expected band size for SRD5A2 is at 28 kDa.

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