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SRD5A2 Recombinant Rabbit mAb

Catalog # AP100315

Product Information

Application	WB, IP
Primary Accession	P31213
Other Accession	P31213
Reactivity	Human, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Recombinant
Calculated MW	28407
Physical State	Liquid
Immunogen	A synthesized peptide derived from human SRD5A2
Epitope Specificity	1-70/254
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	10mM phosphate buffered saline(pH 7.4) with 150mM sodium chloride, 0.05% BSA, 0.02% Proclin300 and 50% glycerol.
SIMILARITY	Belongs to the steroid 5-alpha reductase family.
DISEASE	Defects in SRD5A2 are the cause of pseudovaginal perineoscrotal hypospadias (PPSH) [MIM:264600]. A form of male pseudohermaphroditism in which 46,XY males show ambiguous genitalia at birth, including perineal hypospadias and a blind perineal pouch, and develop masculinization at puberty. The name of the disorder stems from the finding of a blind-ending perineal opening resembling a vagina and a severely hypospadiac penis with the urethra opening onto the perineum.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Converts testosterone (T) into 5-alpha-dihydrotestosterone (DHT) and progesterone or corticosterone into their corresponding 5-alpha-3-oxosteroids. It plays a central role in sexual differentiation and androgen physiology.

Additional Information

Gene ID	6716
Other Names	5ART2; S5AR 2; ST5AR2; S5A2_HUMAN; SRD5A2; 5 alpha-SR2; SR type 2; Steroid 5-alpha-reductase 2 (S5AR 2); Type II 5-alpha reductase; 1.3.1.22; Q3UTZ9_MOUSE; S5A2_MOUSE; S5A2_PIG; S5A2_RAT; steroid 5 alpha-reductase 2; steroid-5-alpha-reductase, alpha polypeptide 2 (3-oxo-5 alpha-steroid delta 4-dehydrogenase alpha 2); 3-oxo-5-alpha-steroid 4-dehydrogenase 2
Dilution	WB=1:500-2000,IP=1:20-50

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

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