

HSD3B1 Rabbit mAb

Catalog # AP77009

Product Information

Application	WB, IF, ICC
Primary Accession	P14060
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Immunogen	A synthesized peptide derived from human HSD3B1
Purification	Affinity Purified
Calculated MW	42252

Additional Information

Gene ID	3283
Other Names	HSD3B1
Dilution	WB~~1/500-1/1000 IF~~1:50~200 ICC~~N/A
Format	Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	HSD3B1 (HGNC:5217)
Synonyms	3BH, HSDB3A
Function	<p>A bifunctional enzyme responsible for the oxidation and isomerization of 3beta-hydroxy-Delta(5)-steroid precursors to 3-oxo- Delta(4)-steroids, an essential step in steroid hormone biosynthesis. Specifically catalyzes the conversion of pregnenolone to progesterone, 17alpha-hydroxypregnenolone to 17alpha-hydroxyprogesterone, dehydroepiandrosterone (DHEA) to 4-androstenedione, and androstenediol to testosterone. Additionally, catalyzes the interconversion between 3beta-hydroxy and 3-oxo-5alpha-androstane steroids controlling the bioavailability of the active forms. Specifically converts dihydrotestosterone to its inactive form 5alpha-androstenediol, that does not bind androgen receptor/AR. Also converts androstenedione, a precursor of testosterone and estrone, to epiandrosterone (PubMed:1401999, PubMed:2139411). Expected to use</p>

NAD(+) as preferred electron donor for the 3 β -hydroxy-steroid dehydrogenase activity and NADPH for the 3-ketosteroid reductase activity (Probable).

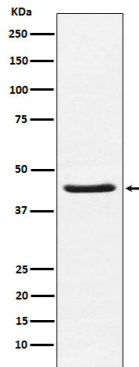
Cellular Location

Endoplasmic reticulum membrane; Single-pass membrane protein.
Mitochondrion membrane; Single-pass membrane protein

Tissue Location

Placenta and skin (PubMed:1401999). Predominantly expressed in mammary gland tissue.

Images



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