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

Anti-HSD3B1 Antibody (clone 3C11-D4)

Mouse Anti Human Monoclonal Antibody
Catalog # ALS17852

Product Information

Application	WB, IHC-P, E
Primary Accession	P14060
Predicted	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1,k
Clone Names	3C11-D4
Calculated MW	42252
Concentration (mg/ml)	0.5 mg/ml

Additional Information

Gene ID	3283
Alias Symbol	HSD3B1
Other Names	HSD3B1, 3BETAHSD, 3-beta-HSD I, 3BH, HSD3B, HSDB3A, HSDB3, Steroid Delta-isomerase, Trophoblast antigen FDO161G, Progesterone reductase, SDR11E1
Target/Specificity	Human HSD3B1
Reconstitution & Storage	Protein A purified
Precautions	Anti-HSD3B1 Antibody (clone 3C11-D4) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	HSD3B1 (HGNC:5217)
Synonyms	3BH, HSDB3A
Function	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 bioavalability of the active forms. Specifically converts dihydrotestosterone to its inactive form

	5alpha-androstanediol, that does not bind androgen receptor/AR. Also converts androstanedione, a precursor of testosterone and estrone, to epiandrosterone (PubMed:1401999, PubMed:2139411). Expected to use NAD(+) as preferred electron donor for the 3beta-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.

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