

Anti-HSD3B1 Rabbit Monoclonal Antibody
Catalog # ABO16042**Specification****Anti-HSD3B1 Rabbit Monoclonal Antibody - Product Information**

Application	WB, IF, ICC
Primary Accession	P14060
Host	Rabbit
Isotype	IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid

Description

Anti-HSD3B1 Rabbit Monoclonal Antibody . Tested in WB, ICC/IF applications. This antibody reacts with Human.

Anti-HSD3B1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 3283

Other Names

3 beta-hydroxysteroid dehydrogenase/Delta 5-->4-isomerase type 1, 3 beta-hydroxysteroid dehydrogenase/Delta 5-->4-isomerase type I, 3-beta-HSD I, 3-beta-hydroxy-5-ene steroid dehydrogenase, 3-beta-hydroxy-Delta(5)-steroid dehydrogenase, 1.1.1.145, 3-beta-hydroxysteroid 3-dehydrogenase, 1.1.1.270, Delta-5-3-ketosteroid isomerase, Dihydrotestosterone oxidoreductase, 1.1.1.210, Steroid Delta-isomerase, 5.3.3.1, Trophoblast antigen FDO161G, HSD3B1 ([HGNC:5217](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=5217)), 3BH, HSDB3A

Calculated MW

42 kDa KDa

Application Details

WB 1:500-1:2000
ICC/IF 1:50-1:200

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.

Immunogen

A synthesized peptide derived from human HSD3B1

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.

Anti-HSD3B1 Rabbit Monoclonal Antibody - 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 bioavailability 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

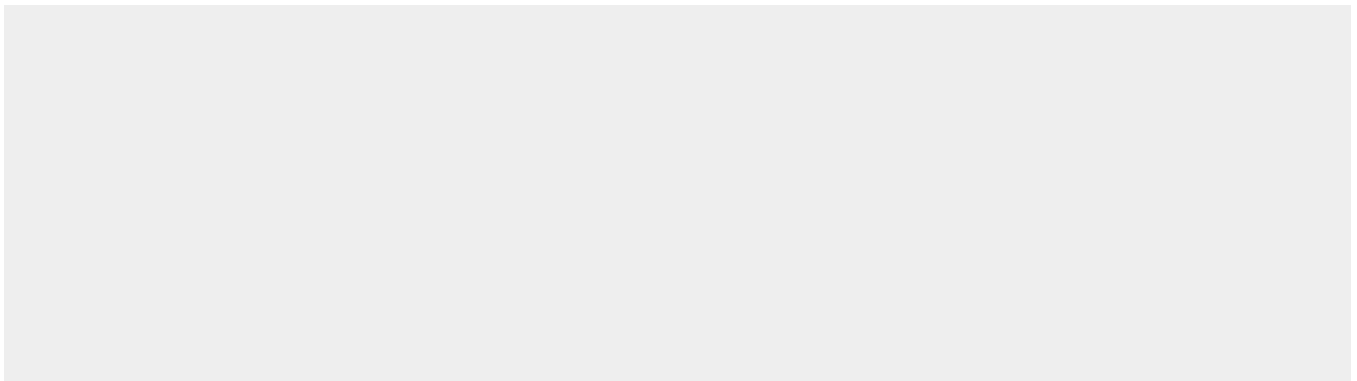
Placenta and skin (PubMed:1401999). Predominantly expressed in mammary gland tissue.

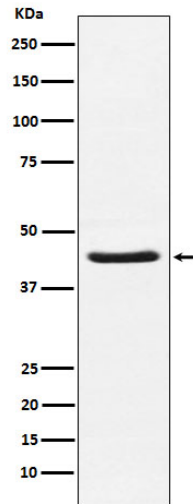
Anti-HSD3B1 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-HSD3B1 Rabbit Monoclonal Antibody - Images





Western blot analysis of HSD3B1 expression in Human placenta lysate.