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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), 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.**

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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 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.

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 Cytomety
- Cell Culture

Anti-HSD3B1 Rabbit Monoclonal Antibody - Images

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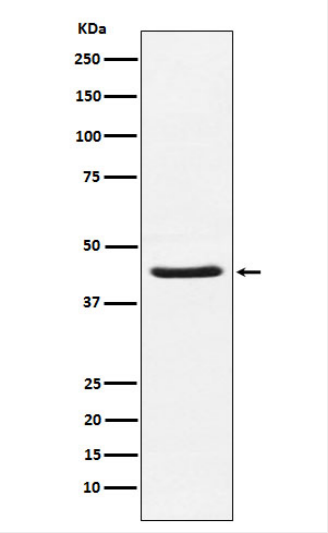

Western blot analysis of HSD3B1 expression in Human placenta lysate.