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HSD3B1 Antibody
Rabbit mAb
Catalog # AP92625

Specification

HSD3B1 Antibody - Product Information

Application	**WB, ICC**
Primary Accession	P14060
Clonality	**Monoclonal**

Other Names
3-beta-HSD I; 3BETAHSD; 3BH; 3BHSD; HSD3B; HSD3B1; HSDB3; HSDB3A; SDR11E1;

Isotype	**Rabbit IgG**
Host	**Rabbit**
Calculated MW	**42252 Da**

HSD3B1 Antibody - Additional Information

Dilution	**WB~~1:1000** **ICC~~N/A**
Purification	**Affinity-chromatography**
Immunogen	**A synthesized peptide derived from human HSD3B1**
Description	**3-beta-HSD is a bifunctional enzyme, that catalyzes the oxidative conversion of Delta(5)-ene-3-beta-hydroxy steroid, and the oxidative conversion of ketosteroids.**
Storage Condition and Buffer	**Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.**

HSD3B1 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:<a

href="http://www.uniprot.org/citations/1401999" target="_blank">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

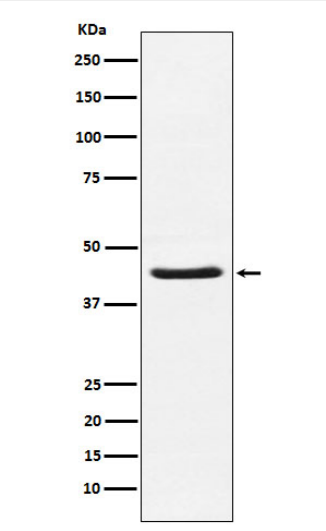
Tissue Location
Placenta and skin (PubMed:1401999). Predominantly expressed in mammary gland tissue.

HSD3B1 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

HSD3B1 Antibody - Images



Western blot analysis of HSD3B1 expression in Human placenta lysate.