

**HSD3B1 Antibody**  
Rabbit mAb  
Catalog # AP92625

## Specification

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### HSD3B1 Antibody - Product Information

Application	WB, ICC
Primary Accession	<a href="#">P14060</a>
Clonality	Monoclonal
<b>Other Names</b>	
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

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 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:<a href="http://www.uniprot.org/citations/1401999" target="\_blank">1401999</a>, PubMed:<a href="http://www.uniprot.org/citations/2139411" target="\_blank">2139411</a>). 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

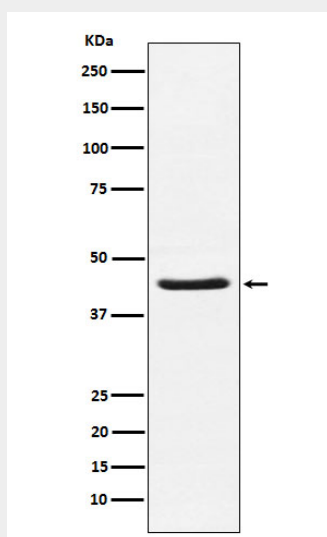
Placenta and skin (PubMed:1401999). Predominantly expressed in mammary gland tissue.

### 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 Cytometry](#)
- [Cell Culture](#)

### HSD3B1 Antibody - Images



Western blot analysis of HSD3B1 expression in Human placenta lysate.