

# Anti-HSD3B1 Rabbit Monoclonal Antibody

Catalog # ABO16042

## Product Information

---

|                          |                                                                                                                 |
|--------------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB, IF, ICC                                                                                                     |
| <b>Primary Accession</b> | <a href="#">P14060</a>                                                                                          |
| <b>Host</b>              | Rabbit                                                                                                          |
| <b>Isotype</b>           | IgG                                                                                                             |
| <b>Reactivity</b>        | Human                                                                                                           |
| <b>Clonality</b>         | Monoclonal                                                                                                      |
| <b>Format</b>            | Liquid                                                                                                          |
| <b>Description</b>       | Anti-HSD3B1 Rabbit Monoclonal Antibody . Tested in WB, ICC/IF applications.<br>This antibody reacts with Human. |

## Additional Information

---

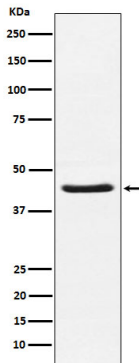
|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene ID</b>             | 3283                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Other Names</b>         | 3 beta-hydroxysteroid dehydrogenase/Delta 5-->4-isomerase type 1, 3<br>beta-hydroxysteroid dehydrogenase/Delta 5-->4-isomerase type I, 3-beta-HSD<br>I, 3-beta-hydroxy-5-ene steroid dehydrogenase,<br>3-beta-hydroxy-Delta(5)-steroid dehydrogenase, 1.1.1.145,<br>3-beta-hydroxysteroid 3-dehydrogenase, 1.1.1.270, Delta-5-3-ketosteroid<br>isomerase, Dihydrotestosterone oxidoreductase, 1.1.1.210, Steroid<br>Delta-isomerase, 5.3.3.1, Trophoblast antigen FDO161G, HSD3B1<br>( <a href="#">HGNC:5217</a> ), 3BH, HSDB3A |
| <b>Calculated MW</b>       | 42252                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Application Details</b> | WB 1:500-1:2000<br>ICC/IF 1:50-1:200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Source</b>              | Eukaryota                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Contents</b>            | Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium<br>azide and 50% glycerol, 0.4-0.5mg/ml BSA.                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Clone Names</b>         | Clone: 26H21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Immunogen</b>           | A synthesized peptide derived from human HSD3B1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Purification</b>        | Affinity-chromatography                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Storage</b>             | Store at -20°C for one year. For short term storage and frequent use, store at<br>4°C for up to one month. Avoid repeated freeze-thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                   |

## Protein Information

---

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>              | HSD3B1 ( <a href="#">HGNC:5217</a> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Synonyms</b>          | 3BH, HSDB3A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Function</b>          | 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-androstenediol, that does not bind androgen receptor/AR. Also converts androstenedione, a precursor of testosterone and estrone, to epiandrosterone (PubMed: <a href="#">1401999</a> , PubMed: <a href="#">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). |
| <b>Cellular Location</b> | Endoplasmic reticulum membrane; Single-pass membrane protein.<br>Mitochondrion membrane; Single-pass membrane protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Tissue Location</b>   | Placenta and skin (PubMed:1401999). Predominantly expressed in mammary gland tissue.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## Images



Western blot analysis of HSD3B1 expression in Human placenta lysate.

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