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Goat Anti-HSD3B1 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1543a

Specification

Goat Anti-HSD3B1 Antibody - Product Information

Application	**WB**
Primary Accession	P14060
Other Accession	NP_000853, 3283
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**42252**

Goat Anti-HSD3B1 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, Trophoblast antigen FDO161G, 3-beta-hydroxy-Delta(5)-steroid dehydrogenase, 1.1.1.145, 3-beta-hydroxy-5-ene steroid dehydrogenase, Progesterone reductase, Steroid Delta-isomerase, 5.3.3.1, Delta-5-3-ketosteroid isomerase, HSD3B1, 3BH, HSDB3A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-HSD3B1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-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: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.

Goat Anti-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

Goat Anti-HSD3B1 Antibody - Images

AF1543a (0.01 µg/ml) staining of Human Placenta lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

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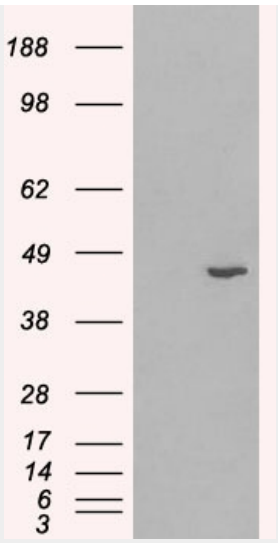

HEK293 overexpressing Human HSD3B1 (RC204497) and probed with AF1543a (mock transfection in first lane), tested by Origene.

Goat Anti-HSD3B1 Antibody - References

Association of HSD3B1 and HSD3B2 gene polymorphisms with essential hypertension, aldosterone level, and left ventricular structure. Shimodaira M, et al. Eur J Endocrinol, 2010 Oct. PMID 20660004.
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