

Anti-HSD17B6 Antibody

Catalog # ABO10711

Specification

Anti-HSD17B6 Antibody - Product Information

ApplicationWB, IHC-PPrimary Accession014756HostRabbitReactivityHumanClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for 17-beta-hydroxysteroid dehydrogenase type 6

Rabbit IgG polyclonal antibody for 17-beta-hydroxysteroid dehydrogenase type 6(HSD17B6) detection. Tested with WB, IHC-P in Human.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-HSD17B6 Antibody - Additional Information

Gene ID 8630

Other Names

17-beta-hydroxysteroid dehydrogenase type 6, 17-beta-HSD 6, 17-beta-HSD6, 1.1.1.105, 1.1.1.239, 1.1.1.62, 3-alpha->beta-hydroxysteroid epimerase, 3-alpha->beta-HSE, Oxidative 3-alpha hydroxysteroid dehydrogenase, Short chain dehydrogenase/reductase family 9C member 6, HSD17B6, RODH, SDR9C6

Calculated MW 35966 MW KDa

Application Details Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, By Heat

Western blot, 0.1-0.5 μg/ml, Human

Subcellular Localization

Microsome membrane ; Peripheral membrane protein ; Lumenal side . Early endosome membrane ; Peripheral membrane protein ; Lumenal side .

Tissue Specificity

Detected in liver and prostate (at protein level). Detected in adult liver, lung, brain, placenta, prostate, adrenal gland, testis, mammary gland, spleen, spinal cord and uterus. Detected in caudate nucleus, and at lower levels in amygdala, corpus callosum, hippocampus, substantia nigra and thalamus. Detected in fetal lung, liver and brain.

Protein Name

17-beta-hydroxysteroid dehydrogenase type 6(17-beta-HSD 6/17-beta-HSD6)

Contents



Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human HSD17B6(300-317aa SLADYILTRSWPKPAQAV).

Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the short-chain dehydrogenases/reductases (SDR) family.

Anti-HSD17B6 Antibody - Protein Information

Name HSD17B6

Synonyms RODH, SDR9C6

Function

NAD-dependent oxidoreductase with broad substrate specificity that shows both oxidative and reductive activity (in vitro). Has 17- beta-hydroxysteroid dehydrogenase activity towards various steroids (in vitro). Converts 5-alpha-androstan-3-alpha,17-beta-diol to androsterone and estradiol to estrone (in vitro). Has 3-alpha-hydroxysteroid dehydrogenase activity towards androsterone (in vitro). Has retinol dehydrogenase activity towards all-trans-retinol (in vitro). Can convert androsterone to epi-androsterone. Androsterone is first oxidized to 5-alpha-androstane-3,17-dione and then reduced to epi- andosterone. Can act on both C-19 and C-21 3-alpha-hydroxysteroids.

Cellular Location

Microsome membrane; Peripheral membrane protein; Lumenal side. Early endosome membrane; Peripheral membrane protein; Lumenal side

Tissue Location

Detected in liver and prostate (at protein level). Detected in adult liver, lung, brain, placenta, prostate, adrenal gland, testis, mammary gland, spleen, spinal cord and uterus. Detected in caudate nucleus, and at lower levels in amygdala, corpus callosum, hippocampus, substantia nigra and thalamus. Detected in fetal lung, liver and brain.

Anti-HSD17B6 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry



<u>Immunofluorescence</u>

- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-HSD17B6 Antibody - Images



Anti- HSD17B6 antibody, ABO10711, Western blottingAll lanes: Anti HSD17B6 (ABO10711) at 0.5ug/mlLane 1: Human Placenta Tissue Lysate at 50ugLane 2: MCF-7 Whole Cell Lysate at 40ugPredicted bind size: 35KDObserved bind size: 35KD

Anti-HSD17B6 Antibody - Background

Hydroxysteroid 17-beta dehydrogenase 6 is an enzyme that in humans is encoded by the HSD17B6 gene. The protein encoded by this gene has both oxidoreductase and epimerase activities and is involved in androgen catabolism. Baker ME et al point out expression of 17beta-HSDs had an important role in the early evolution of the physiological response to androgens and estrogens. Biswas and Russell concluded that 17beta-HSD6 and RoDH play opposing roles in androgen action; 17beta-HSD6 inactivates 3alpha-adiol by conversion to androsterone and RoDH activates 3alpha-adiol by conversion to dihydrotestosterone. The synthesis of an active steroid hormone by back conversion of an inactive metabolite represents a potentially important mechanism by which the steady state level of a transcriptional effector can be regulated.