

17 β -HSD3 (M-125): sc-135044

BACKGROUND

17 β -HSD3 (17 β -hydroxysteroid dehydrogenase type 3) belongs to the 17 β -HSD family of proteins that regulate the availability of steroids within various tissues throughout the body. 17 β -HSD3 is expressed predominantly in the testis. It is an NADPH-dependent, membrane-bound enzyme. 17 β -HSD3 converts inactive steroids to their active form through its reductive activity. More specifically, 17 β -HSD3 catalyzes the conversion of androstenedione to testosterone in the testis. The production of testosterone is necessary for male sex differentiation. Mutations in the gene that encodes this protein can result in an autosomal recessive male to female sex reversal. A deficiency of 17 β -HSD3 results in a defect in the biosynthesis of testosterone. 17 β -HSD3 inhibitors include 1,4-androstadiene-1,6,17-trione, androsterone 3 β -substituted derivatives, glycyrrhizin, glycyrrhetic acid, losulazine, amphetamine, methotrexate and S-petasine.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HSD17B3 (human) mapping to 9q22.32; Hsd17b3 (mouse) mapping to 13 B3.

SOURCE

17 β -HSD3 (M-125) is a rabbit polyclonal antibody raised against amino acids 181-305 mapping at the C-terminus of 17 β -HSD3 of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

17 β -HSD3 (M-125) is recommended for detection of 17 β -HSD3 of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for 17 β -HSD3 siRNA (m): sc-61917, 17 β -HSD3 shRNA Plasmid (m): sc-61917-SH and 17 β -HSD3 shRNA (m) Lentiviral Particles: sc-61917-V.

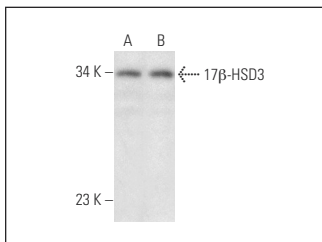
Molecular Weight of 17 β -HSD3: 35 kDa.

Positive Controls: DU 145 cell lysate: sc-2268 or HUV-EC-C whole cell lysate: sc-364180.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotting A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



17 β -HSD3 (M-125): sc-135044. Western blot analysis of 17 β -HSD3 expression in DU 145 (A) and HUV-EC-C (B) whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.