

3 β -HSD7 (H-137): sc-98636

BACKGROUND

3 β -hydroxysteroid dehydrogenase (3 β -HSD), also known as HSD3B1 or HSD3B3, is a bifunctional enzyme that plays a crucial role in the synthesis of all classes of hormonal steroids. 3 β -hydroxysteroid dehydrogenase type 7 (3 β -HSD7) is a 369 amino acid protein belonging to the 3 β -HSD family. Localized to the membrane of the endoplasmic reticulum, 3 β -HSD7 plays an active role in the initial stages of bile synthesis from cholesterol. 3 β -HSD7 catalyzes the oxidative conversion of δ 5-ene-3- β -hydroxy steroid and is active against 7- α hydroxylated sterol substrates. Mutations in the gene encoding 3 β -HSD7 are associated with congenital bile acid synthesis defect, which leads to neonatal cholestasis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HSD3B7 (human) mapping to 16p11.2; Hsd3b7 (mouse) mapping to 7 F3.

SOURCE

3 β -HSD7 (H-137) is a rabbit polyclonal antibody raised against amino acids 233-369 mapping at the C-terminus of 3 β -HSD7 of human origin.

PRODUCT

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

RESEARCH USE

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

APPLICATIONS

3 β -HSD7 (H-137) is recommended for detection of 3 β -HSD7 of mouse, rat and 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).

3 β -HSD7 (H-137) is also recommended for detection of 3 β -HSD7 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for 3 β -HSD7 siRNA (h): sc-72402, 3 β -HSD7 siRNA (m): sc-72403, 3 β -HSD7 shRNA Plasmid (h): sc-72402-SH, 3 β -HSD7 shRNA Plasmid (m): sc-72403-SH, 3 β -HSD7 shRNA (h) Lentiviral Particles: sc-72402-V and 3 β -HSD7 shRNA (m) Lentiviral Particles: sc-72403-V.

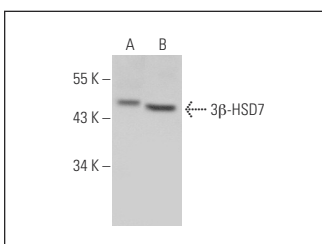
Molecular Weight of 3 β -HSD7: 41 kDa.

Positive Controls: COLO 205 whole cell lysate: sc-364177 or NIH/3T3 whole cell lysate: sc-2210.

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 Blotto 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



3 β -HSD7 (H-137): sc-98636. Western blot analysis of 3 β -HSD7 expression in COLO 205 (A) and NIH/3T3 (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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.