17β-HSD6 (A-25): sc-101878



The Power to Question

BACKGROUND

17β-HSD6 (17β hydroxysteroid dehydrogenase type 6), also known as RODH (retinol dehydrogenase), oxidative 3- α -hydroxysteroid dehydrogenase or HSE (3- α -hydroxysteroid epimerase), belongs to the 17β-HSD family of proteins that regulate the availability of steroids within various tissues throughout the body. 17β-HSD6 is an NAD-dependent enzyme that is expressed in prostate and liver tissues. Localizing to the lumenal side of the microsome, 17β-HSD6 plays an important role in androgen and estrogen catabolism. 17β-HSD6 exhibits oxidoreductase activity, converting 3 α -adiol to dihydrotestosterone, and epimerase activity, converting androsterone to epi-androsterone. Via its ability to inactivate androgens and estrogens, 17β-HSD6 negatively regulates the signaling activity that is mediated by these steroid hormones.

REFERENCES

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- Kamao, M., Hatakeyama, S., Sakaki, T., Sawada, N., Inouye, K., Kubodera, N., Reddy, G.S. and Okano, T. 2005. Measurement and characterization of C-3 epimerization activity toward vitamin D3. Arch. Biochem. Biophys. 436: 196-205.

CHROMOSOMAL LOCATION

Genetic locus: HSD17B6 (human) mapping to 12q13.3; Hsd17b6 (mouse) mapping to 10 D3.

SOURCE

 17β -HSD6 (A-25) is a Protein A purified rabbit polyclonal antibody raised against 17β -HSD6 of human origin.

STORAGE

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

PRODUCT

Each vial contains 100 μg IgG in 1.0 ml PBS with <0.1% sodium azide, 0.1% gelatin and <0.02% sucrose.

APPLICATIONS

17β-HSD6 (A-25) is recommended for detection of 17β-HSD6 of mouse, rat, human and dog 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), immunohistochemistry (including paraffin-embedded sections) (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 -HSD6 siRNA (h): sc-95705, 17 β -HSD6 siRNA (m): sc-108265, 17 β -HSD6 shRNA Plasmid (h): sc-95705-SH, 17 β -HSD6 shRNA Plasmid (m): sc-108265-SH, 17 β -HSD6 shRNA (h) Lentiviral Particles: sc-95705-V and 17 β -HSD6 shRNA (m) Lentiviral Particles: sc-108265-V.

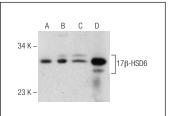
Molecular Weight of 17β-HSD6: 35 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, DU 145 cell lysate: sc-2268 or PC-3 cell lysate: sc-2220.

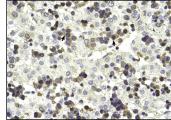
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



17 β -HSD6 (A-25): sc-101878. Western blot analysis of 17 β -HSD6 expression in Hep G2 (A), DU 145 (B) and PC-3 (C) whole cell lysates and mouse prostate tissue extract (D).



17β-HSD6 (A-25): sc-101878. Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing cytoplasmic staining.

RESEARCH USE

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