SANTA CRUZ BIOTECHNOLOGY, INC.

17β-HSD7 (K-12): sc-160116

BACKGROUND

17β-HSD7 (17β hydroxysteroid dehydrogenase type 7), also designated 3-keto-steroid reductase, belongs to the 17β-HSD family of proteins, which regulate the availability of steroids within various tissues throughout the body. 17β-HSD7 is a 341 amino acid protein that converts estrone to estradiol and is also involved in cholesterol biosynthesis. 17β-HSD7 is highly expressed in adrenal gland, liver, lung and thymus. It is also expressed in the corpus luteum, where it is thought to play a role in fetal development. Single nucleotide polymorphisms in the gene encoding 17β-HSD7 have been shown to affect its level of transcription in LNCaP and DU145 cells, which may modulate an adverse reaction induced by estramustine phosphate sodium.

REFERENCES

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STORAGE

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

CHROMOSOMAL LOCATION

Genetic locus: Hsd17b7 (mouse) mapping to 1 H3.

SOURCE

17β-HSD7 (K-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of 17β-HSD7 of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-160116 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

17β-HSD7 (K-12) is recommended for detection of 17β-HSD7 of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other 17β-HSD family members.

Suitable for use as control antibody for 17β-HSD7 siRNA (m): sc-108266, 17β-HSD7 shRNA Plasmid (m): sc-108266-SH and 17β-HSD7 shRNA (m) Lentiviral Particles: sc-108266-V.

Molecular Weight of 17β-HSD7: 38/37/34 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

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