**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**


**APPLICATIONS**

17β-HSD7 (F-4) is recommended for detection of 17β-HSD7 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 17β-HSD7 siRNA (h): sc-88433, 17β-HSD7 siRNA (m): sc-108266, 17β-HSD7 shRNA Plasmid (h): sc-88433-SH, 17β-HSD7 shRNA Plasmid (m): sc-108266-SH, 17β-HSD7 shRNA (h) Lentiviral Particles: sc-88433-V and 17β-HSD7 shRNA (m) Lentiviral Particles: sc-108266-V.

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

Positive Controls: Hep G2 cell lysate: sc-2227, NTERA-2 cl.D1 whole cell lysate: sc-364181 or HL-60 whole cell lysate: sc-2209.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG BP-HRP: sc-516102 or m-IgG BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2035 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGx BP-FITC: sc-516140 or m-IgGx BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

**PRODUCT**

Each vial contains 200 µg IgG κ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. 17β-HSD7 (F-4) is available conjugated to agarose (sc-393936 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393936 HRP), 200 µg/ml, for WB, IHC/IP and ELISA; to either phycoerythrin (sc-393936 PE), fluorescein (sc-393936 FITC), Alexa Fluor® 488 (sc-393936 AF488), Alexa Fluor® 546 (sc-393936 AF546), Alexa Fluor® 594 (sc-393936 AF594) or Alexa Fluor® 647 (sc-393936 AF647), 200 µg/ml, for WB (RGB), IF, IHC/IF and FCM; and to either Alexa Fluor® 680 (sc-393936 AF680) or Alexa Fluor® 790 (sc-393936 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**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. Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.