

17 β -HSD13 (H-40): sc-134665

BACKGROUND

17 β -HSD13 (17 β hydroxysteroid dehydrogenase type 13), also designated short-chain dehydrogenase/reductase 9 (SCDR9), belongs to the 17 β -HSD family of proteins, which regulate the availability of steroids within various tissues throughout the body. 17 β -HSD13 is a 300 amino acid secreted protein that is highly expressed in liver and is also detected in ovary, bone marrow, kidney, brain, lung, skeletal muscle, bladder and testis. The gene encoding 17 β -HSD13 maps to chromosome 4, which houses nearly 6% of the human genome and has the largest gene deserts (regions of the genome with no protein encoding genes) of all of the human chromosomes. Defects in some of the genes located on chromosome 4 are associated with Huntington's disease, Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease.

REFERENCES

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- Cowan, C.M., et al. 2006. Selective neuronal degeneration in Huntington's disease. *Curr. Top. Dev. Biol.* 75: 25-71.
- Liu, S., et al. 2007. Molecular cloning and expression analysis of a new gene for short-chain dehydrogenase/reductase 9. *Acta Biochim. Pol.* 54: 213-218.
- Versteegh, F.G., et al. 2007. Growth hormone analysis and treatment in Ellis-van Creveld syndrome. *Am. J. Med. Genet. A* 143A: 2113-2121.
- Doherty, E.S., et al. 2007. Muenke syndrome (FGFR3-related craniosynostosis): expansion of the phenotype and review of the literature. *Am. J. Med. Genet. A* 143A: 3204-3215.
- Moe, M., et al. 2008. Gene expression profiles in liver of pigs with extreme high and low levels of androstenone. *BMC Vet. Res.* 4: 29.

CHROMOSOMAL LOCATION

Genetic locus: HSD17B13 (human) mapping to 4q22.1.

SOURCE

17 β -HSD13 (H-40) is a rabbit polyclonal antibody raised against amino acids 261-300 mapping at the C-terminus of 17 β -HSD13 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.

STORAGE

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

APPLICATIONS

17 β -HSD13 (H-40) is recommended for detection of 17 β -HSD13 of 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 -HSD13 siRNA (h): sc-89308, 17 β -HSD13 shRNA Plasmid (h): sc-89308-SH and 17 β -HSD13 shRNA (h) Lentiviral Particles: sc-89308-V.

Molecular Weight of 17 β -HSD13 isoform 1: 30 kDa.

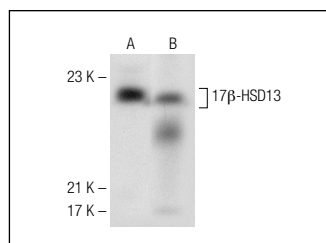
Molecular Weight of 17 β -HSD13 isoform 2: 34 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

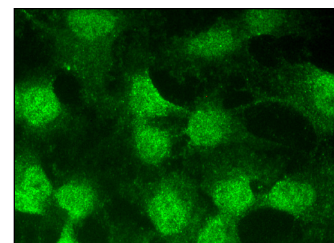
RECOMMENDED SECONDARY REAGENTS

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



17 β -HSD13 (H-40): sc-134665. Western blot analysis of 17 β -HSD13 expression in Hep G2 whole cell lysate (A) and rat liver tissue extract (B).



17 β -HSD13 (H-40): sc-134665. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear and cytoplasmic localization.

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.