

17 β -HSD14 (S-12): sc-131361

BACKGROUND

17 β -HSD14 (17 β hydroxysteroid dehydrogenase type 14), also designated dehydrogenase/reductase SDR family member 10 (DHRS10) or Retinal short-chain dehydrogenase/reductase SDR3, belongs to the 17 β -HSD family of proteins, which regulate the availability of steroids within various tissues throughout the body. 17 β -HSD14 is a 270 amino acid protein that converts oestradiol to oestrone. It exists as a homotetramer that localizes to the cytoplasm and is highly expressed in brain, placenta, liver and kidney. The gene encoding 17 β -HSD14 maps to chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin (Ig) superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEA-CAM and PSG families, and Fc receptors (FcRs).

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HSD17B14 (human) mapping to 19q13.33; Hsd17b14 (mouse) mapping to 7 B4.

STORAGE

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

SOURCE

17 β -HSD14 (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of 17 β -HSD14 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.

Blocking peptide available for competition studies, ready P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

17 β -HSD14 (S-12) is recommended for detection of 17 β -HSD14 of mouse, rat and human 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 17 β -HSD family members.

17 β -HSD14 (S-12) is also recommended for detection of 17 β -HSD14 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for 17 β -HSD14 siRNA (h): sc-97848, 17 β -HSD14 siRNA (m): sc-108264, 17 β -HSD14 shRNA Plasmid (h): sc-97848-SH, 17 β -HSD14 shRNA Plasmid (m): sc-108264-SH, 17 β -HSD14 shRNA (h) Lentiviral Particles: sc-97848-V and 17 β -HSD14 shRNA (m) Lentiviral Particles: sc-108264-V.

Molecular Weight of 17 β -HSD14: 28 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.