SANTA CRUZ BIOTECHNOLOGY, INC.

DHRS9 (G-15): sc-103467

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The Power to Question

BACKGROUND

DHRS9 (dehydrogenase/reductase (SDR family) member 9), also known as RDHL, RDH15, RDHTBE, SDR9C4 or RETSDR8, is a 319 amino acid protein that localizes to the membrane of both the microsome and the endoplasmic reticulum and belongs to the short-chain dehydrogenase/reductase family. Expressed at high levels in trachea and epidermis and present at lower levels in brain, colon, heart, lung, testis, placenta and skeletal muscle, DHRS9 functions as a homotetramer that converts both 3-α-tetrahydroprogesterone (allopregnanolone) and 3-α-androstanediol to dihydroxyprogesterone and is thought to play a role in retinoic acid biosynthesis. Multiple isoforms of DHRS9 exist due to alternative splicing events.

REFERENCES

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3. Soref, C.M., et al. 2001. Characterization of a novel airway epithelial cell-specific short chain alcohol dehydrogenase/reductase gene whose expression is up-regulated by retinoids and is involved in the metabolism of retinol. J. Biol. Chem. 276: 24194-24202.
4. Markova, N.G., et al. 2003. Expression pattern and biochemical characteristics of a major epidermal retinol dehydrogenase. Mol. Genet. Metab. 78: 119-135.
5. Jette, C., et al. 2004. The tumor suppressor adenomatous polyposis coli and caudal related homeodomain protein regulate expression of retinol dehydrogenase L. J. Biol. Chem. 279: 34397-34405.
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7. Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 612131. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
8. Persson, B., et al. 2009. The SDR (short-chain dehydrogenase/reductase and related enzymes) nomenclature initiative. Chem. Biol. Interact. 178: 94-98.

CHROMOSOMAL LOCATION

Genetic locus: DHRS9 (human) mapping to 2q31.1; Dhrs9 (mouse) mapping to 2 C2.

SOURCE

DHRS9 (G-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DHRS9 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 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-103467 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DHRS9 (G-15) is recommended for detection of DHRS9 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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); non cross-reactive with other DHRS family members.

DHRS9 (G-15) is also recommended for detection of DHRS9 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for DHRS9 siRNA (h): sc-94615, DHRS9 siRNA (m): sc-105296, DHRS9 shRNA Plasmid (h): sc-94615-SH, DHRS9 shRNA Plasmid (m): sc-105296-SH, DHRS9 shRNA (h) Lentiviral Particles: sc-94615-V and DHRS9 shRNA (m) Lentiviral Particles: sc-105296-V.

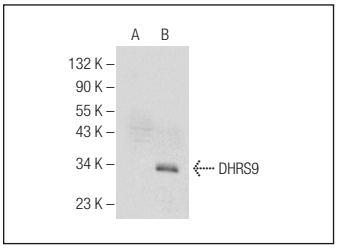
Molecular Weight of DHRS9: 35 kDa.

Positive Controls: DHRS9 (h): 293T Lysate: sc-371280.

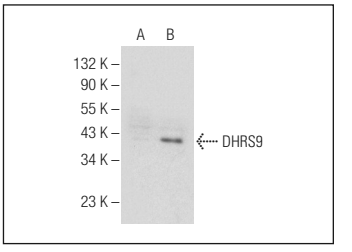
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



DHRS9 (G-15): sc-103467. Western blot analysis of DHRS9 expression in non-transfected: sc-117752 (**A**) and human DHRS9 transfected: sc-116592 (**B**) 293T whole cell lysates.



DHRS9 (G-15): sc-103467. Western blot analysis of DHRS9 expression in non-transfected: sc-117752 (**A**) and human DHRS9 transfected: sc-371280 (**B**) 293T whole cell lysates.

RESEARCH USE

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