

RDH11 (EE-12): sc-100588

BACKGROUND

RDH11 is a member of the short chain retinol dehydrogenase/reductase family that acts as an oxidoreductive catalyst towards retinoids. Expressed in a wide variety of tissues including the liver and prostate, RDH11 can reduce both *trans*- and *cis*-retinaldehydes, as well as oxidize *trans*-retinols. RDH11 prefers NADP⁺ as a cofactor and, although it has both oxidative and reductive capabilities, it is more efficient in the reductive direction. In the retinal pigment epithelium, RDH11 completes the final step in the retinoid cycle of pigment regeneration by catalyzing the oxidation of 11-*cis*-retinol to 11-*cis* retinal. No diseases are currently related to mutations in the gene encoding RDH11.

REFERENCES

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- Kasus-Jacobi, A., et al. 2003. Characterization of mouse short-chain aldehyde reductase (SCALD), an enzyme regulated by sterol regulatory element-binding proteins. *J. Biol. Chem.* 278: 32380-32389.
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- Gallego, O., et al. 2006. Comparative functional analysis of human medium-chain dehydrogenases, short-chain dehydrogenases/reductases and aldo-keto reductases with retinoids. *Biochem. J.* 399: 101-109.

CHROMOSOMAL LOCATION

Genetic locus: RDH11 (human) mapping to 14q24.1.

SOURCE

RDH11 (EE-12) is a mouse monoclonal antibody raised against recombinant RDH11 of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ lambda light chain 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

RDH11 (EE-12) is recommended for detection of RDH11 of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for RDH11 siRNA (h): sc-72264, RDH11 shRNA Plasmid (h): sc-72264-SH and RDH11 shRNA (h) Lentiviral Particles: sc-72264-V.

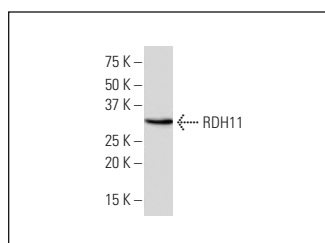
Molecular Weight of RDH11: 39 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or PC-3 cell lysate: sc-2220.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-2003 (0.5 ml agarose/2.0 ml).

DATA



RDH11 (EE-12): sc-100588. Western blot analysis of RDH11 expression in HeLa whole cell lysate.

RESEARCH USE

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

PROTOCOLS

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