

RDH5 (H-40): sc-98348

BACKGROUND

Retinol dehydrogenase 5 (RDH5), also known as 11-*cis* retinol dehydrogenase (11-*cis* RDH) or RDH1, is a 318 amino acid protein belonging to the short-chain dehydrogenases/reductases (SDR) family. Highly expressed in the retinal pigment epithelium and localized to the membrane, RDH5 catalyzes the final step in the biosynthesis of 11-*cis* retinal (11-*cis* retinaldehyde), the universal chromophore of visual pigment, from all-*trans* retinol (vitamin A). RDH5 has been shown to be active in the presence of NAD as a cofactor, but not in the presence of NADP. Mutations in the gene encoding RDH5 lead to *Fundus albipunctatus* (FA), a rare form of stationary night blindness characterized by delay in the regeneration of cone and rod photopigments.

REFERENCES

1. Yamamoto, H., et al. 1999. Mutations in the gene encoding 11-*cis* retinol dehydrogenase cause delayed dark adaptation and fundus albipunctatus. *Nat. Genet.* 22: 188-191.
2. Online Mendelian Inheritance in Man, OMIM[™]. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 601617. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: RDH5 (human) mapping to 12q13.2; Rdh5 (mouse) mapping to 10 D3.

SOURCE

RDH5 (H-40) is a rabbit polyclonal antibody raised against amino acids 111-150 mapping within an internal region of RDH5 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

RDH5 (H-40) is recommended for detection of RDH5 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).

RDH5 (H-40) is also recommended for detection of RDH5 in additional species, including canine and porcine.

Suitable for use as control antibody for RDH5 siRNA (h): sc-76380, RDH5 siRNA (m): sc-76381, RDH5 shRNA Plasmid (h): sc-76380-SH, RDH5 shRNA Plasmid (m): sc-76381-SH, RDH5 shRNA (h) Lentiviral Particles: sc-76380-V and RDH5 shRNA (m) Lentiviral Particles: sc-76381-V.

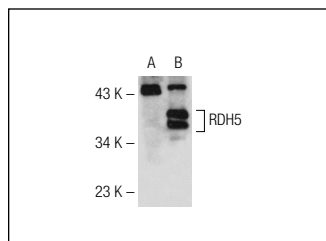
Molecular Weight of RDH5: 35 kDa.

Positive Controls: RDH5 (h): 293T Lysate: sc-158923.

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



RDH5 (H-40): sc-98348. Western blot analysis of RDH5 expression in non-transfected: sc-117752 (A) and human RDH5 transfected: sc-158923 (B) 293T whole cell lysates.

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.

PROTOCOLS

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

MONOS
Satisfaction
Guaranteed

Try **RDH5 (G-5): sc-377057**, our highly recommended monoclonal alternative to RDH5 (H-40).