

# RDH13 Rabbit pAb

RDH13 Rabbit pAb Catalog # AP58968

#### **Product Information**

**Application** WB

Primary Accession Q8NBN7

**Reactivity** Rat, Rabbit, Dog, Horse

Host Rabbit
Clonality Polyclonal
Calculated MW 35932
Physical State Liquid

**Immunogen** KLH conjugated synthetic peptide derived from human RDH13

Epitope Specificity 101-200/331

**Isotype** IgG

**Purity** affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SIMILARITY Belongs to the short-chain dehydrogenases/reductases (SDR) family.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

**Background Descriptions** RDH13, also known as all-trans and 9-cis retinol dehydrogenase 13 or

SDR7C3, is a 331 amino acid mitochondrial protein belonging to the short-chain dehydrogenases/reductases (SDR) family. Widely expressed, mostly in eye, pancreas, placenta and lung, RDH13 localizes on the outer side of the inner mitochondrial membrane. Related to microsomal retinoid oxidoreductase RDH11, RDH13 is considered to be a major enzyme among the RDH family of proteins. Catalytically active, RDH13 recognizes retinoids as substrates and may function in retinoic acid production. RDH13 may function to protect the mitochondria against oxidative stress. Leher congenital

to protect the mitochondria against oxidative stress. Leber congenital amaurosis (LCA) type 3, an inherited autosomal recessive retinal disease, has been associated with defects of RDH13. LCA represents the most common genetic cause of congenital visual impairment in infants and children.

#### **Additional Information**

**Gene ID** 112724

Other Names Retinol dehydrogenase 13, 1.1.1.300, Short chain dehydrogenase/reductase

family 7C member 3, RDH13, SDR7C3

**Target/Specificity** Expressed mostly in eye, pancreas, placenta and lung. In the retina, detected

in the inner segment of the photoreceptor cells. Weak signals were observed in a small population of inner nuclear neurons and the inner plexiform layer.

**Dilution** WB=1:500-2000

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

#### **Protein Information**

Name RDH13

Synonyms SDR7C3

**Function** Retinol dehydrogenase with a clear preference for NADP. Oxidizes

all-trans-retinol, but seems to reduce all-trans-retinal with much higher

efficiency (PubMed: 18039331). Has no activity toward steroids

(PubMed: 18039331).

**Cellular Location** Mitochondrion inner membrane; Peripheral membrane protein.

Note=Localized on the outer side of the inner mitochondrial membrane.

**Tissue Location** Widely expressed (PubMed:18039331). In the retina, detected in the inner

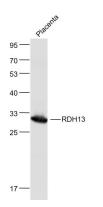
segment of the photoreceptor cells. Weak signals are observed in a small population of inner nuclear neurons and the inner plexiform layer

(PubMed:12226107).

## **Background**

RDH13, also known as all-trans and 9-cis retinol dehydrogenase 13 or SDR7C3, is a 331 amino acid mitochondrial protein belonging to the short-chain dehydrogenases/reductases (SDR) family. Widely expressed, mostly in eye, pancreas, placenta and lung, RDH13 localizes on the outer side of the inner mitochondrial membrane. Related to microsomal retinoid oxidoreductase RDH11, RDH13 is considered to be a major enzyme among the RDH family of proteins. Catalytically active, RDH13 recognizes retinoids as substrates and may function in retinoic acid production. RDH13 may function to protect the mitochondria against oxidative stress. Leber congenital amaurosis (LCA) type 3, an inherited autosomal recessive retinal disease, has been associated with defects of RDH13. LCA represents the most common genetic cause of congenital visual impairment in infants and children.

### **Images**



Sample:

Placenta (Mouse) Lysate at 40 ug

Primary: Anti-RDH13 (AP58968) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000

dilution

Predicted band size: 36 kD Observed band size: 29 kD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.