

# **RDH13 Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58968

## **Specification**

Buffer

# **RDH13 Polyclonal Antibody - Product Information**

Application WB, IHC-P, IHC-F, IF, E

Primary Accession <u>Q8NBN7</u>

Reactivity
Host
Clonality
Calculated MW
Rat, Dog, Bovine
Rabbit
Polyclonal
36 KDa

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

Proclin300 and 50% Glycerol.

SIMILARITY

Belongs to the short-chain

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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.

0.01M TBS (pH7.4) with 1% BSA, 0.02%

# **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. 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.

### **RDH13 Polyclonal Antibody - 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**

- <span class ="dilution\_WB">WB~~1:1000</span><br \><span class</pre>
- ="dilution IHC-P">IHC-P~~N/A</span><br \><span class
- ="dilution IHC-F">IHC-F~~N/A</span><br \><span class
- ="dilution\_IF">IF $\sim$ 1:50 $\sim$ 200</span><br\><span class ="dilution\_E">E $\sim$ N/A</span>

#### Storage

Store at -20  $^{\circ}$ 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  $^{\circ}$ C.

# **RDH13 Polyclonal Antibody - 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:<a href="http://www.uniprot.org/citations/18039331" target="\_blank">18039331</a>). Has no activity toward steroids (PubMed:<a href="http://www.uniprot.org/citations/18039331" target="\_blank">18039331</a>).

#### **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).

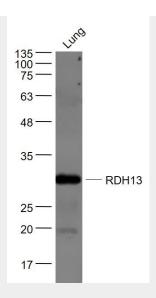
# **RDH13 Polyclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **RDH13 Polyclonal Antibody - Images**





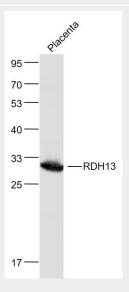
Sample:

Lung (Mouse) Lysate at 40 ug

Primary: Anti- RDH13 (bs-8333R) at 1/1000 dilution

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

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



Sample:

Placenta (Mouse) Lysate at 40 ug

Primary: Anti-RDH13 (bs-8333R) at 1/1000 dilution

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

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