

#### **RDH16 Antibody (N-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5456a

### **Specification**

#### RDH16 Antibody (N-term) - Product Information

**Application** WB, IHC-P, FC,E **Primary Accession** 075452 NP 003699.3 Other Accession Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 35673

Antigen Region 3-31

# RDH16 Antibody (N-term) - Additional Information

#### **Gene ID 8608**

#### **Other Names**

Retinol dehydrogenase 16, 11--, Microsomal NAD(+)-dependent retinol dehydrogenase 4, RoDH-4, Sterol/retinol dehydrogenase, RDH16, RODH4

### Target/Specificity

This RDH16 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 3-31 amino acids from the N-terminal region of human RDH16.

### **Dilution**

WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

### **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

RDH16 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### RDH16 Antibody (N-term) - Protein Information

Name RDH16 (<u>HGNC:29674</u>)



**Function** Oxidoreductase with a preference for NAD. Oxidizes all-trans- retinol, 9-cis-retinol, 11-cis-retinol and 13-cis-retinol to the corresponding aldehydes (PubMed:10329026, PubMed:12534290, PubMed:9677409). Has higher activity towards CRBP-bound retinol than with free retinol (PubMed:12534290). Oxidizes also 3-alpha- hydroxysteroids. Oxidizes androstanediol and androsterone to dihydrotestosterone and androstanedione. Can also catalyze the reverse reaction (PubMed:10329026, PubMed:9677409, PubMed:29541409).

#### **Cellular Location**

Microsome membrane. Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:O54909}; Single- pass membrane protein

#### **Tissue Location**

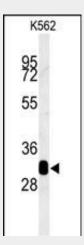
Highly expressed in adult liver (at protein level) (PubMed:9677409). Detected in endometrium, liver and foreskin (PubMed:10329026, PubMed:11967490). Detected in the spineous layers of adult skin, and at lower levels in basal and granular skin layers (PubMed:10329026). Detected in fetal liver and lung

### RDH16 Antibody (N-term) - Protocols

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

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

## RDH16 Antibody (N-term) - Images

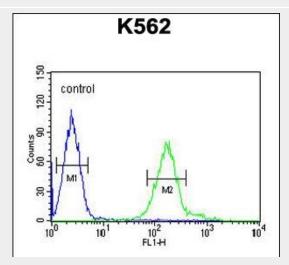


RDH16 Antibody (N-term) (Cat.#AP5456a) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the RDH16 antibody detected the RDH16 protein (arrow).





RDH16 Antibody (N-term (Cat. #AP5456a) immunohistochemistry analysis in formalin fixed and paraffin embedded human skin carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the RDH16 Antibody (N-term for immunohistochemistry. Clinical relevance has not been evaluated.



RDH16 Antibody (N-term) (Cat. #AP5456a) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### RDH16 Antibody (N-term) - Background

Retinol dehydrogenase 16 (RDH16) is an oxidoreductase with a preference for NAD. It oxidizes all-trans-retinol and 13-cis-retinol to the corresponding aldehydes. RDH16 has higher activity towards CRBP-bound retinol than with free retinol. It oxidizes 3-alpha-hydroxysteroids and also oxidizes androstanediol and androsterone to dihydrotestosterone and androstanedione. RDH16 can also catalyze the reverse reaction.

### **RDH16 Antibody (N-term) - References**

Persson, B., et al. Chem. Biol. Interact. 178 (1-3), 94-98 (2009): Lapshina, E.A., et al. Biochemistry 42(3):776-784(2003) Cain, J.M., et al. Am. J. Obstet. Gynecol. 186(4):675-683(2002)