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# ADH4 Antibody (C-term)

**Affinity Purified Rabbit Polyclonal Antibody (Pab)**
**Catalog # AP10128b**

## Specification

### ADH4 Antibody (C-term) - Product Information

| | |
|---|---|
| Application | **WB, IHC-P, FC,E** |
| Primary Accession | P08319 |
| Other Accession | NP_000661.2 |
| Reactivity | **Human, Mouse** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Calculated MW | **40222** |
| Antigen Region | **319-348** |

### ADH4 Antibody (C-term) - Additional Information

**Gene ID** 127

**Other Names**
Alcohol dehydrogenase 4, Alcohol dehydrogenase class II pi chain, ADH4

**Target/Specificity**
This ADH4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 319-348 amino acids from the C-terminal region of human ADH4.

**Dilution**
WB~~1:1000
IHC-P~~1:10~50
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**
ADH4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### ADH4 Antibody (C-term) - Protein Information

**Name** ADH4 (HGNC:252)

**Function** Catalyzes the NAD-dependent oxidation of either all-trans- retinol or 9-cis-retinol (PubMed:17279314). Also oxidizes long chain omega-hydroxy fatty acids, such as 20-HETE, producing both the intermediate aldehyde, 20-oxoarachidonate and the end product, a dicarboxylic acid, (5Z,8Z,11Z,14Z)-eicosatetraenedioate (PubMed:16081420). Also catalyzes the reduction of benzoquinones (PubMed:10514444).

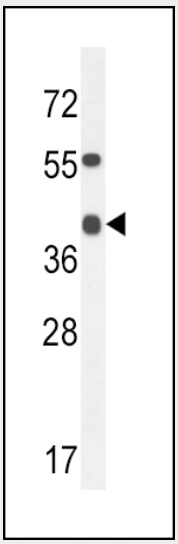
**Cellular Location**
Cytoplasm.

## ADH4 Antibody (C-term) - Protocols

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

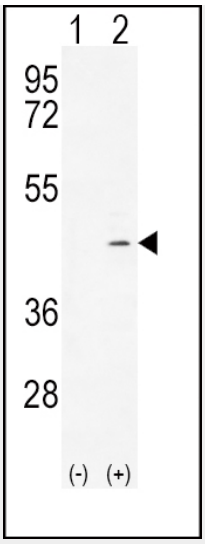
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## ADH4 Antibody (C-term) - Images

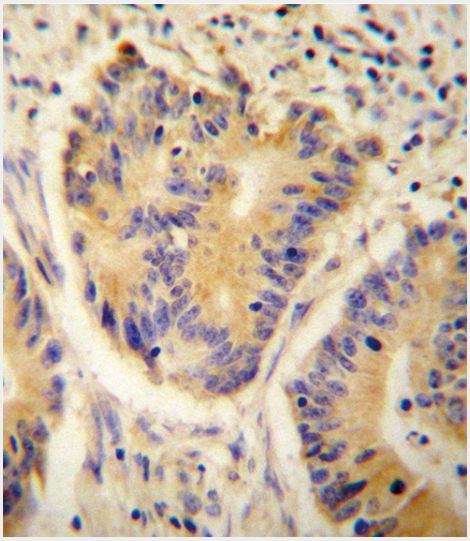



ADH4 Antibody (C-term) (Cat. #AP10128b) western blot analysis in mouse heart tissue lysates (35ug/lane).This demonstrates the ADH4 antibody detected the ADH4 protein (arrow).

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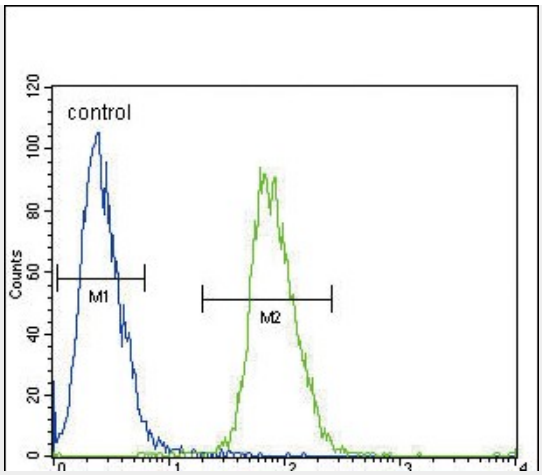



Western blot analysis of ADH4 (arrow) using rabbit polyclonal ADH4 Antibody (C-term) (Cat. #AP10128b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the ADH4 gene.



ADH4 antibody(C-term) (Cat. #AP10128b) immunohistochemistry analysis in formalin fixed and paraffin embedded human colon carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the ADH4 antibody(C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

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ADH4 Antibody (C-term) (Cat. #AP10128b) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

**ADH4 Antibody (C-term) - Background**

This gene encodes class II alcohol dehydrogenase 4 pi subunit, which is a member of the alcohol dehydrogenase family. Members of this enzyme family metabolize a wide variety of substrates, including ethanol, retinol, other aliphatic alcohols, hydroxysteroids, and lipid peroxidation products. Class II alcohol dehydrogenase is a homodimer composed of 2 pi subunits. It exhibits a high activity for oxidation of long-chain aliphatic alcohols and aromatic alcohols and is less sensitive to pyrazole. This gene is localized to chromosome 4 in the cluster of alcohol dehydrogenase genes.

**ADH4 Antibody (C-term) - References**

Pochareddy, S., et al. Gene 460 (1-2), 1-7 (2010) :
Preuss, U.W., et al. Addict Biol (2010) In press :
Liu, C.Y., et al. Carcinogenesis 31(7):1259-1263(2010)
Rainero, I., et al. Headache 50(1):92-98(2010)
Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010) :

**ADH4 Antibody (C-term) - Citations**

- Impact of hepatitis C virus and alcohol, alone and combined, on the unfolded protein response in primary human hepatocytes
- Impact of Dyrk1A level on alcohol metabolism.
- Novel roles for AhR and ARNT in the regulation of alcohol dehydrogenases in human hepatic cells.