

**Anti-ADH4 Picoband Antibody**  
Catalog # ABO11648**Specification**

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**Anti-ADH4 Picoband Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P08319</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Alcohol dehydrogenase 4 (ADH4) detection. Tested with WB in Human; Mouse; Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-ADH4 Picoband Antibody - Additional Information**

**Gene ID** 127

**Other Names**

Alcohol dehydrogenase 4, 1.1.1.1, Alcohol dehydrogenase class II pi chain, ADH4

**Calculated MW**

40222 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

**Subcellular Localization**

Cytoplasm.

**Protein Name**

Alcohol dehydrogenase 4

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**Immunogen**

E. coli-derived human ADH4 recombinant protein (Position: K218-F380). Human ADH4 shares 68.7% and 71.8% amino acid (aa) sequence identity with mouse and rat ADH4, respectively.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins.

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Anti-ADH4 Picoband Antibody - Protein Information**

**Name** ADH4 ([HGNC:252](#))

**Function**

Catalyzes the NAD-dependent oxidation of either all-trans- retinol or 9-cis-retinol (PubMed:[17279314](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/16081420)). Also catalyzes the reduction of benzoquinones (PubMed:[10514444](http://www.uniprot.org/citations/10514444)).

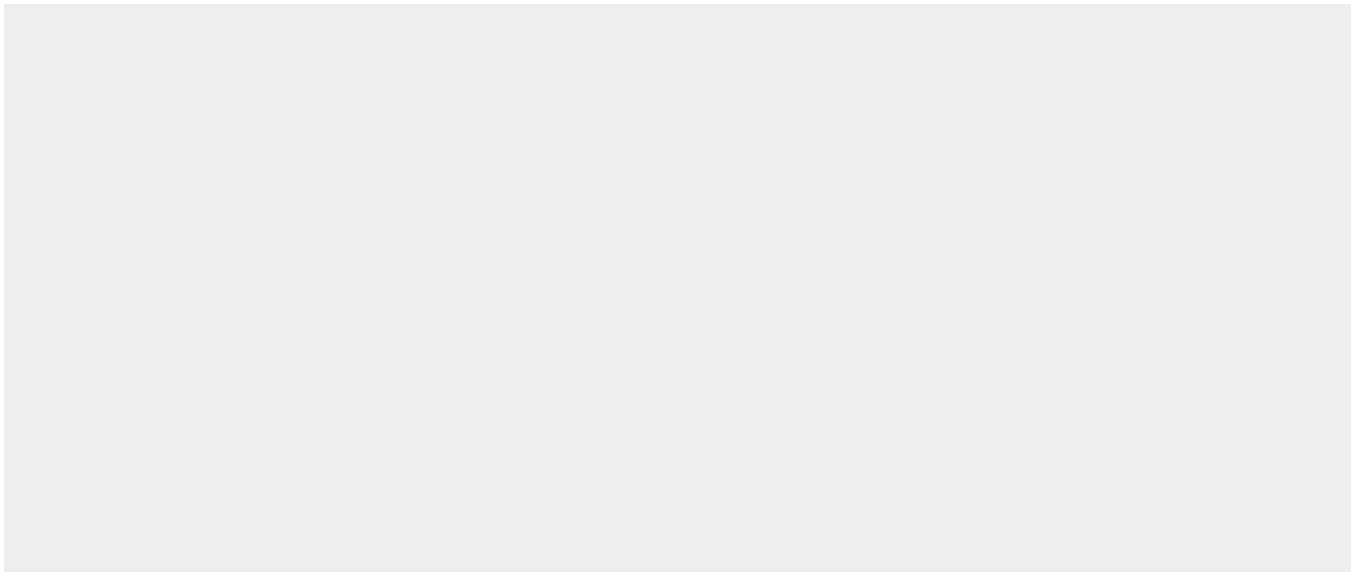
**Cellular Location**

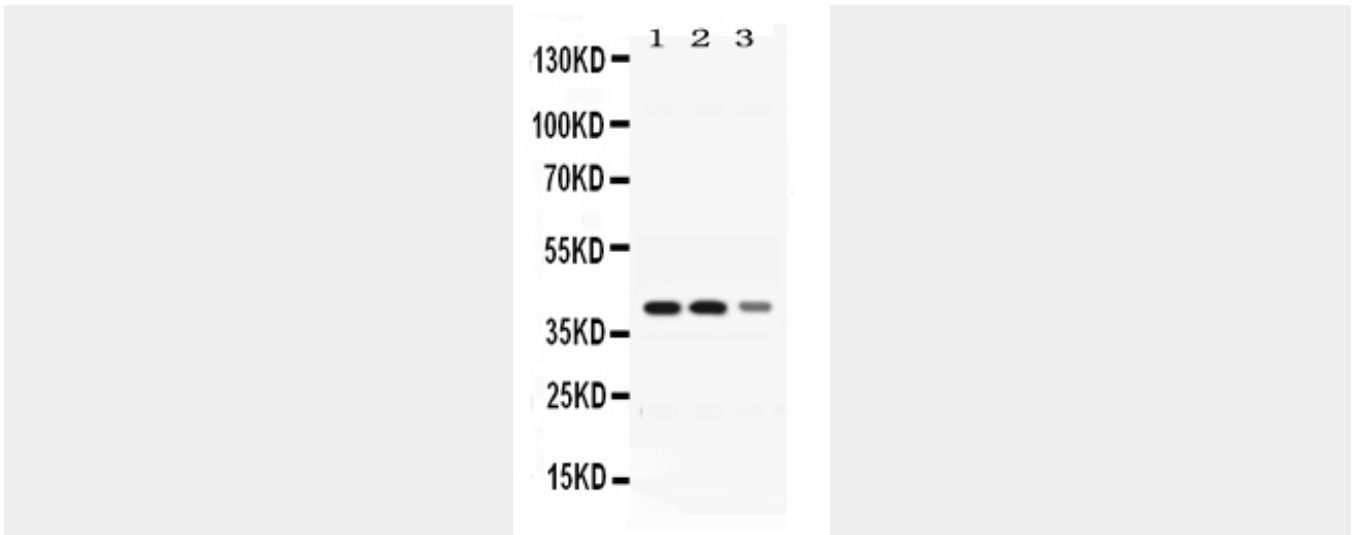
Cytoplasm.

**Anti-ADH4 Picoband Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-ADH4 Picoband Antibody - Images**



Western blot analysis of ADH4 expression in rat liver extract (lane 1), mouse liver extract (lane 2) and HEPG2 whole cell lysates (lane 3). ADH4 at 40KD was detected using rabbit anti- ADH4 Antigen Affinity purified polyclonal antibody (Catalog # ABO11648) at 0.5  $\mu$ g/mL. The blot was developed using chemiluminescence (ECL) method .

#### **Anti-ADH4 Picoband Antibody - Background**

Alcohol dehydrogenase 4 is an enzyme that in humans is encoded by the ADH4 gene. 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.