

Anti-ABP1 Picoband Antibody

Catalog # ABO11658

### Specification

# **Anti-ABP1 Picoband Antibody - Product Information**

ApplicationWBPrimary AccessionP19801HostRabbitReactivityHuman, RatClonalityPolyclonalFormatLyophilizedDescriptionDescription

Rabbit IgG polyclonal antibody for Amiloride-sensitive amine oxidase [copper-containing](AOC1) detection. Tested with WB in Human;Rat.

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

### Anti-ABP1 Picoband Antibody - Additional Information

Gene ID 26

**Other Names** Amiloride-sensitive amine oxidase [copper-containing], DAO, Diamine oxidase, 1.4.3.22, Amiloride-binding protein 1, Amine oxidase copper domain-containing protein 1, Histaminase, Kidney amine oxidase, KAO, AOC1, ABP1, DAO1

Calculated MW 85378 MW KDa

**Application Details** Western blot, 0.1-0.5 μg/ml, Human, Rat<br>

**Subcellular Localization** Secreted, extracellular space.

**Tissue Specificity** Placenta and kidney.

Protein Name Amiloride-sensitive amine oxidase [copper-containing]

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human ABP1 (144-180aa STAEYALLYHTLQEATKPLHQFFLNTTGFSFQDCHDR), different from the related mouse sequence by ten amino acids, and from the related rat sequence by eight amino acids.



**Purification** Immunogen affinity purified.

**Cross Reactivity** No cross reactivity with other proteins.

Storage

At -20°C for one year. After r°Constitution, 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-ABP1 Picoband Antibody - Protein Information

Name AOC1 {ECO:0000303|PubMed:19764817, ECO:0000312|HGNC:HGNC:80}

**Function** 

Catalyzes the oxidative deamination of primary amines to the corresponding aldehydes with the concomitant production of hydrogen peroxide and ammonia (PubMed:<a href="http://www.uniprot.org/citations/12072962" target="\_blank">12072962</a>, PubMed:<a href="http://www.uniprot.org/citations/19764817" target="\_blank">19764817</a>, PubMed:<a href="http://www.uniprot.org/citations/239684" target="\_blank">239684</a>, PubMed:<a href="http://www.uniprot.org/citations/239684" target="\_blank">8144586</a>). Its preferred substrates are the diamines histamine and 1-methylhistamine and it could therefore play a role in allergic and immune responses (PubMed:<a href="http://www.uniprot.org/citations/12072962" target="\_blank">12072962</a>). Its order a href="http://www.uniprot.org/citations/12072962" target="\_blank">12072962</a>). Its preferred substrates are the diamines histamine and 1-methylhistamine and it could therefore play a role in allergic and immune responses (PubMed:<a href="http://www.uniprot.org/citations/12072962" target="\_blank">12072962</a>). Its order a href="http://www.uniprot.org/citations/12072962" target="\_blank">12072962</a>). Its could also act on cadaverine and putrescine, two products of amino acid catabolism (PubMed:<a href="http://www.uniprot.org/citations/12072962" target="\_blank">12072962</a>). It could also act on polyamines, like spermidine and spermine though less efficiently, and regulate various biological processes (PubMed:<a href="http://www.uniprot.org/citations/12072962" target="\_blank">12072962</a>/a>, PubMed:<a href="http://www.uniprot.org/citations/12072962" target="\_blank">12072962</a>/a>). It could also act on polyamines, like spermidine and spermine though less efficiently, and regulate various biological processes (PubMed:<a href="http://www.uniprot.org/citations/239684" target="\_blank">239684</a>).

#### **Cellular Location**

Secreted, extracellular space. Cell membrane; Peripheral membrane protein; Extracellular side

#### **Tissue Location**

Widely expressed with higher expression in placenta and kidney.

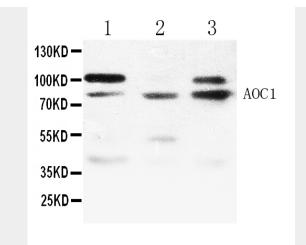
#### **Anti-ABP1 Picoband Antibody - Protocols**

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

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

Anti-ABP1 Picoband Antibody - Images





Western blot analysis of ABP1 expression in NRK whole cell lysates (lane 1), 293T whole cell lysates (lane 2) and MCF-7 whole cell lysates (lane 3). ABP1 at 85KD was detected using rabbit anti- ABP1 Antigen Affinity purified polyclonal antibody (Catalog # ABO11658) at 0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .

# Anti-ABP1 Picoband Antibody - Background

This gene encodes a metal-binding membrane glycoprotein that oxidatively deaminates putrescine, histamine, and related compounds. The encoded protein is inhibited by amiloride, a diuretic that acts by closing epithelial sodium ion channels. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. Catalyzes the degradation of compounds such as putrescine, histamine, spermine, and spermidine, substances involved in allergic and immune responses, cell proliferation, tissue differentiation, tumor formation, and possibly apoptosis. Placental DAO is thought to play a role in the regulation of the female reproductive function.