

**ALDH9A1 Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7850a**

**Specification**

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**ALDH9A1 Antibody (N-term) - Product Information**

Application	<b>WB, IHC-P,E</b>
Primary Accession	<a href="#">P49189</a>
Reactivity	<b>Human, Mouse</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Antigen Region	<b>4-34</b>

**ALDH9A1 Antibody (N-term) - Additional Information**

**Gene ID** 223

**Other Names**

4-trimethylaminobutyraldehyde dehydrogenase, TMABADH, Aldehyde dehydrogenase E3 isozyme, Aldehyde dehydrogenase family 9 member A1, Gamma-aminobutyraldehyde dehydrogenase, R-aminobutyraldehyde dehydrogenase, ALDH9A1, ALDH4, ALDH7, ALDH9

**Target/Specificity**

This ALDH9A1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 4-34 amino acids from the N-terminal region of human ALDH9A1.

**Dilution**

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

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**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**

ALDH9A1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**ALDH9A1 Antibody (N-term) - Protein Information**

**Name** ALDH9A1

**Synonyms** ALDH4, ALDH7, ALDH9 {ECO:0000303|PubMed:

**Function** Converts gamma-trimethylaminobutyraldehyde into gamma- butyrobetaine with high efficiency (in vitro). Can catalyze the irreversible oxidation of a broad range of aldehydes to the corresponding acids in an NAD-dependent reaction, but with low efficiency. Catalyzes the oxidation of aldehydes arising from biogenic amines and polyamines.

#### Cellular Location

Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q9JLJ3}. Cytoplasm

#### Tissue Location

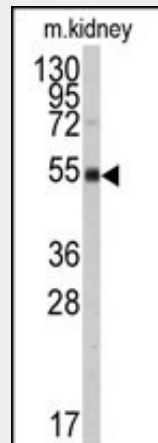
Detected in brain (at protein level) (PubMed:8645224). High expression in adult liver, skeletal muscle, and kidney. Low levels in heart, pancreas, lung and brain (PubMed:8786138) Expressed in all regions of the brain. Expression levels are variable in the different brain areas, with the highest levels in the spinal cord and the lowest in the occipital pole.

### ALDH9A1 Antibody (N-term) - Protocols

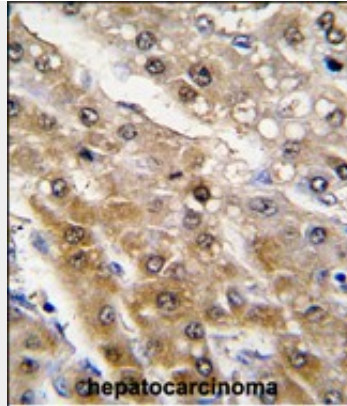
Provided below are standard protocols that you may find useful for product applications.

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

### ALDH9A1 Antibody (N-term) - Images



Western blot analysis of anti-ALDH9A1 Antibody (N-term) (Cat.#AP7850a) in mouse kidney tissue lysates (35ug/lane). ALDH9A1(arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with ALDH9A1 antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

#### **ALDH9A1 Antibody (N-term) - Background**

ALDH9A1 belongs to the aldehyde dehydrogenase family of proteins. The protein has a high activity for oxidation of gamma-aminobutyraldehyde and other amino aldehydes. The enzyme catalyzes the dehydrogenation of gamma-aminobutyraldehyde to gamma-aminobutyric acid (GABA). This isozyme is a tetramer of identical 54-kD subunits.

#### **ALDH9A1 Antibody (N-term) - References**

Cheung,C.L., Hum. Mol. Genet. 18 (4), 679-687 (2009)  
Vaz,F.M., J. Biol. Chem. 275 (10), 7390-7394 (2000)  
Lin,S.W., Genomics 34 (3), 376-380 (1996)

#### **ALDH9A1 Antibody (N-term) - Citations**

- [Aldehyde dehydrogenases contribute to skeletal muscle homeostasis in healthy, aging, and Duchenne muscular dystrophy patients.](#)