

**ALDH6A1 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP1469a**

**Specification**

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**ALDH6A1 Antibody (N-term) - Product Information**

Application	IHC-P, WB, FC,E
Primary Accession	<a href="#">Q02252</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	57840
Antigen Region	30-59

**ALDH6A1 Antibody (N-term) - Additional Information**

**Gene ID** 4329

**Other Names**

Methylmalonate-semialdehyde dehydrogenase [acylating], mitochondrial, MMSDH,  
Malonate-semialdehyde dehydrogenase [acylating], Aldehyde dehydrogenase family 6 member  
A1, ALDH6A1, MMSDH

**Target/Specificity**

This ALDH6A1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 30-59 amino acids from the N-terminal region of human ALDH6A1.

**Dilution**

IHC-P~~1:10~50

WB~~1:1000

FC~~1:10~50

E~~Use at an assay dependent concentration.

**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**

ALDH6A1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**ALDH6A1 Antibody (N-term) - Protein Information**

**Name** ALDH6A1 ([HGNC:7179](#))

**Function** Malonate and methylmalonate semialdehyde dehydrogenase involved in the catabolism of valine, thymine, and compounds catabolized by way of beta-alanine, including uracil and cytidine.

**Cellular Location**

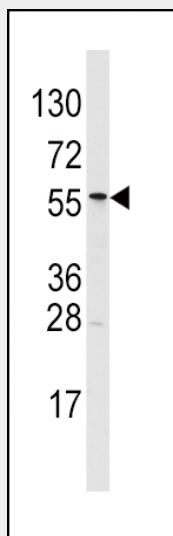
Mitochondrion.

**ALDH6A1 Antibody (N-term) - Protocols**

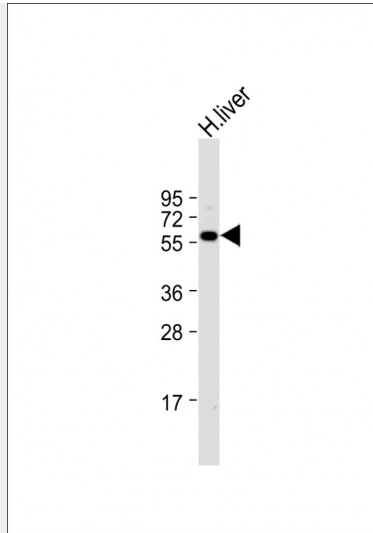
Provided below are standard protocols that you may find useful for product applications.

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

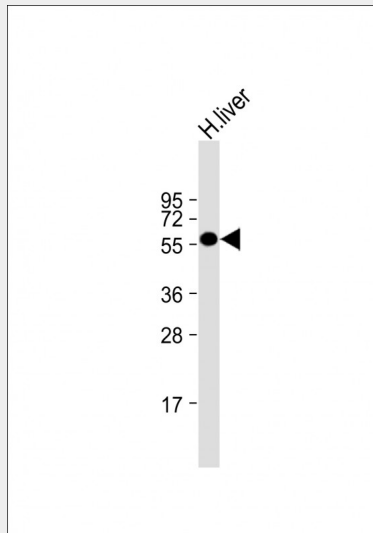
**ALDH6A1 Antibody (N-term) - Images**



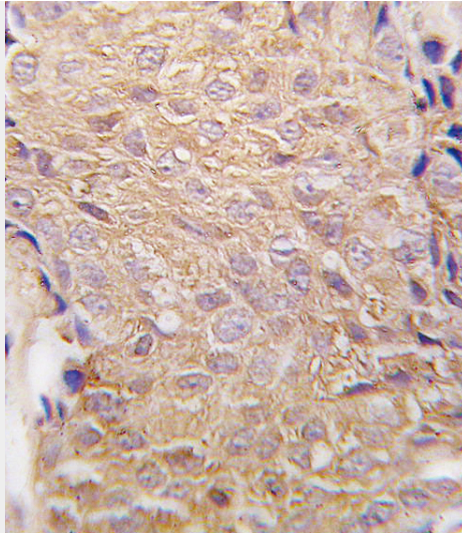
Western blot analysis of ALDH6A1 Antibody (N-term) (Cat.#AP1469a) in T47D cell line lysates (35ug/lane). ALDH6A1 (arrow) was detected using the purified Pab.



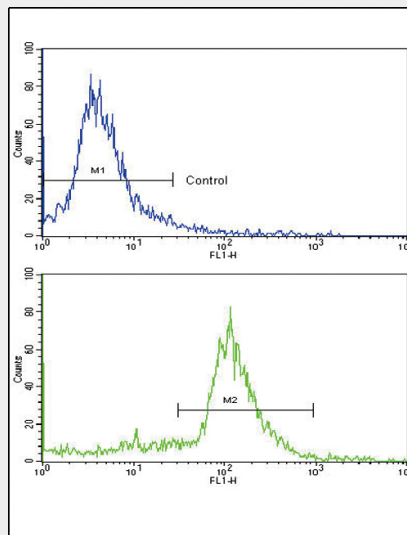
Anti-ALDH6A1 Antibody (N-term) at 1:1000 dilution + human liver lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 58 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with \*ALDH6A1 antibody (N-term) (Cat.#AP1469a), 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.



Flow cytometric analysis of ATDC5 cells using ALDH6A1 Antibody (N-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### ALDH6A1 Antibody (N-term) - Background

ALDH6A1 belongs to the aldehyde dehydrogenases family of proteins. This enzyme plays a role in the valine and pyrimidine catabolic pathways. This protein is a mitochondrial methylmalonate semialdehyde dehydrogenase, and catalyzes the irreversible oxidative decarboxylation of malonate and methylmalonate semialdehydes to acetyl- and propionyl-CoA. Methylmalonate semialdehyde dehydrogenase deficiency is characterized by elevated beta-alanine, 3-hydroxypropionic acid, and both isomers of 3-amino and 3-hydroxyisobutyric acids in urine organic acids.

### ALDH6A1 Antibody (N-term) - References

Kuiper,H., Cytogenet. Genome Res. 109 (4), 533 (2005)  
Anderson,N.L., Mol. Cell Proteomics 3 (4), 311-326 (2004)

Chambliss, K.L., J. Inherit. Metab. Dis. 23 (5), 497-504 (2000)  
Kedishvili, N.Y., J. Biol. Chem. 267 (27), 19724-19729 (1992)