

**ALDH6A1 Antibody**  
**Purified Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM1838b**

**Specification**

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**ALDH6A1 Antibody - Product Information**

Application	IF, WB, IHC-P,E
Primary Accession	<a href="#">Q02252</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1,IgK
Calculated MW	57840

**ALDH6A1 Antibody - 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 mouse immunized with ALDH6A1 recombinant protein.

**Dilution**

IF~~1:25  
WB~~1:1000  
IHC-P~~1:25

**Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, 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**

ALDH6A1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**ALDH6A1 Antibody - 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.

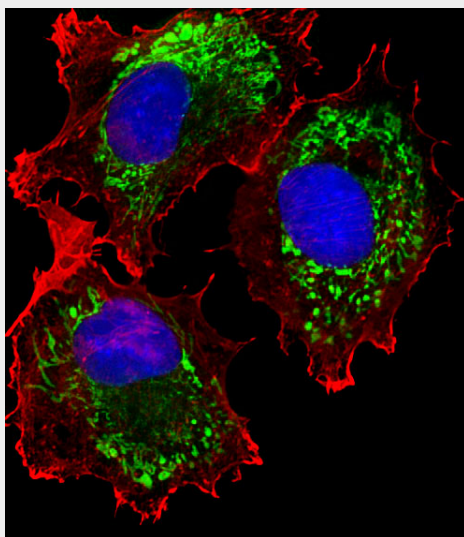
**Cellular Location**  
Mitochondrion.

### **ALDH6A1 Antibody - Protocols**

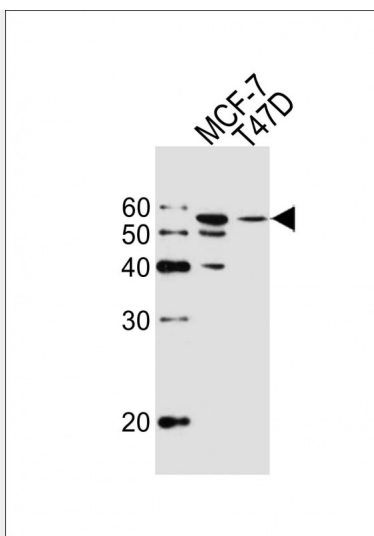
Provided below are standard protocols that you may find useful for product applications.

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

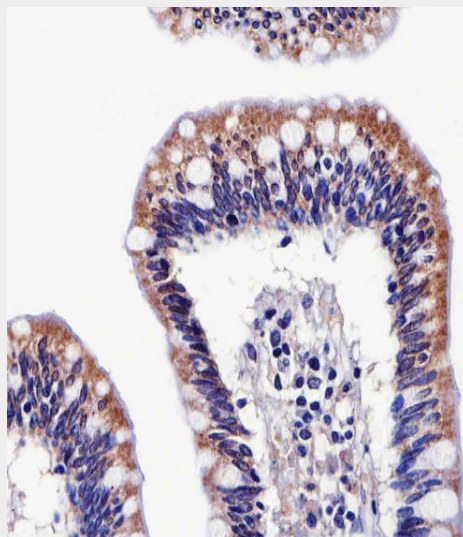
### **ALDH6A1 Antibody - Images**



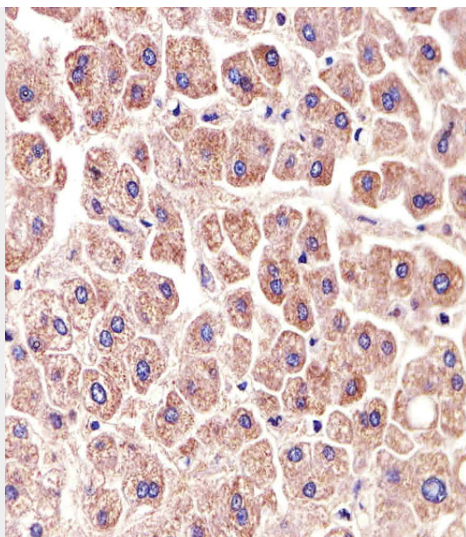
Fluorescent image of MCF-7 cells stained with ALDH6A1 Antibody (Cat#AM1838b). AM1838b was diluted at 1:25 dilution. An Alexa Fluor® 488-conjugated goat anti-mouse IgG at 1:400 dilution was used as the secondary antibody (green). DAPI was used to stain the cell nuclear (blue). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



Western blot analysis of lysates from MCF-7, T47D cell line (from left to right), using ALDH6A1 Antibody(Cat. #AM1838b). AM1838b was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20 $\mu$ g per lane.



Immunohistochemical analysis of paraffin-embedded H.colon section using ALDH6A1 Antibody(Cat#AM1838b). AM1838b was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-mouse IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.



Immunohistochemical analysis of paraffin-embedded H.liver section using ALDH6A1 Antibody(Cat#AM1838b). AM1838b was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-mouse IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.

#### **ALDH6A1 Antibody - Background**

This protein belongs to the aldehyde dehydrogenases family of proteins. This enzyme plays a role in the valine and pyrimidine catabolic pathways. The product of this gene, a mitochondrial methylmalonate semialdehyde dehydrogenase, 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 - References**

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. *Mol Med*, 2010 Jul-Aug. PMID 20379614.  
Association study between single-nucleotide polymorphisms in 199 drug-related genes and commonly measured quantitative traits of 752 healthy Japanese subjects. Saito A, et al. *J Hum Genet*, 2009 Jun. PMID 19343046.  
Physical mapping of CHX10, ALDH6A1, and ABCD4 on bovine chromosome 10q34. Kuiper H, et al. *Cytogenet Genome Res*, 2005. PMID 15909363.  
The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. *Genome Res*, 2004 Oct. PMID 15489334.  
The human plasma proteome: a nonredundant list developed by combination of four separate sources. Anderson NL, et al. *Mol Cell Proteomics*, 2004 Apr. PMID 14718574.