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ALDH6A1 Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AW5291

Specification

ALDH6A1 Antibody - Product Information

Application	**IF, WB, IHC-P,E**
Primary Accession	Q02252
Reactivity	**Human**
Predicted	**Mouse**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**H=58;M=58 KDa**
Isotype	**IgG1,κ**
Antigen Source	**HUMAN**

ALDH6A1 Antibody - Additional Information

Gene ID 4329

Antigen Region
104-523

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

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

Target/Specificity
This ALDH6A1 antibody is generated from mouse immunized with ALDH6A1 recombinant protein.

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.

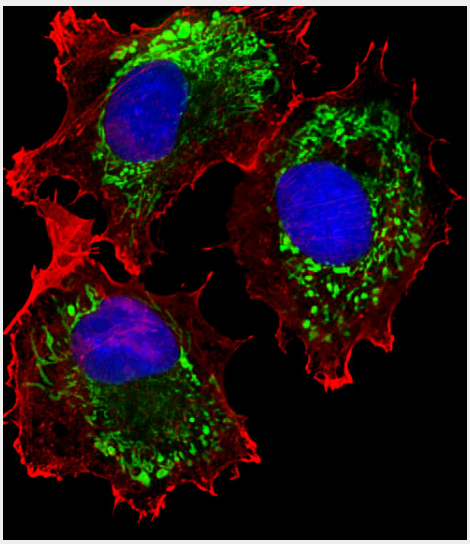
Cellular Location
Mitochondrion.

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 Cytomety
- Cell Culture

ALDH6A1 Antibody - Images



Fluorescent image of MCF-7 cells stained with ALDH6A1 Antibody (Cat#AW5291). AW5291 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).

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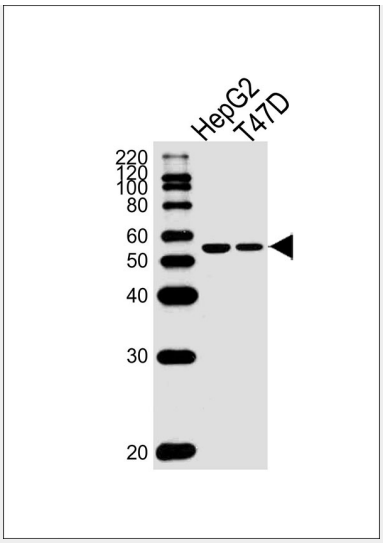
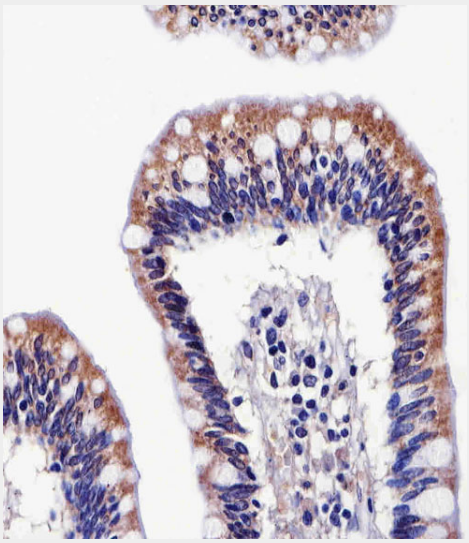


Western blot analysis of lysates from HepG2,T47D cell line (from left to right), using ALDH6A1 Antibody(Cat. #AW5291). AW5291 was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.



Immunohistochemical analysis of paraffin-embedded H.colon section using ALDH6A1 Antibody(Cat#AW5291). AW5291 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.

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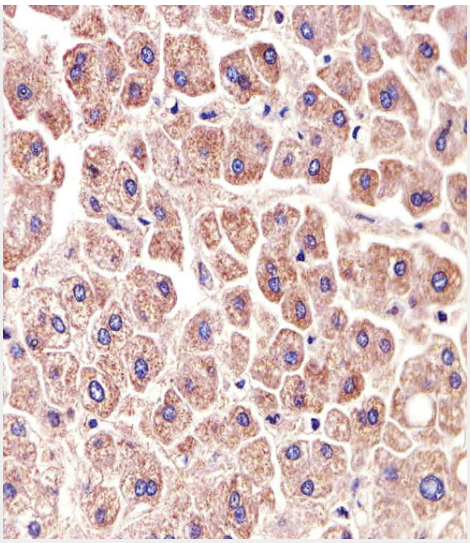

Immunohistochemical analysis of paraffin-embedded H.liver section using ALDH6A1 Antibody(Cat#AW5291). AW5291 was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-mouse IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.

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.