

**ALDH2 Antibody**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AW5333****Specification**

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**ALDH2 Antibody - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | FC, WB, IHC-P,E        |
| Primary Accession | <a href="#">P05091</a> |
| Reactivity        | Human, Mouse, Rat      |
| Host              | Rabbit                 |
| Clonality         | Polyclonal             |
| Calculated MW     | H=56;M=57;Rat=56 KDa   |
| Isotype           | Rabbit IgG             |
| Antigen Source    | HUMAN                  |

**ALDH2 Antibody - Additional Information****Gene ID** 217**Other Names**

ALDH2; ALDM; Aldehyde dehydrogenase, mitochondrial; ALDH class 2; ALDH-E2; ALDH1

**Dilution**

FC~~1:10~50

WB~~1:1000

IHC-P~~1:50~100

**Target/Specificity**

This ALDH2 antibody is generated from rabbits immunized with human ALDH2 recombinant protein.

**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**

ALDH2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**ALDH2 Antibody - Protein Information****Name** ALDH2**Synonyms** ALDM

**Function**

Required for clearance of cellular formaldehyde, a cytotoxic and carcinogenic metabolite that induces DNA damage.

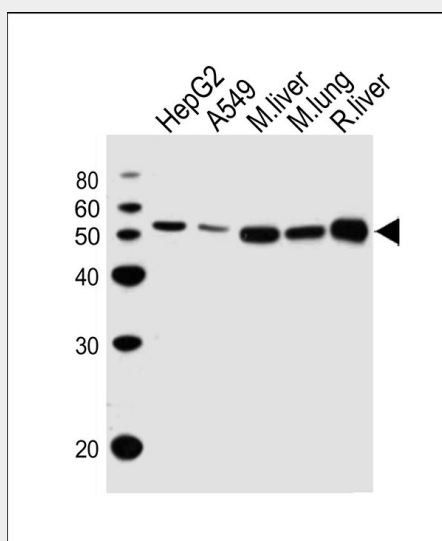
**Cellular Location**

Mitochondrion matrix.

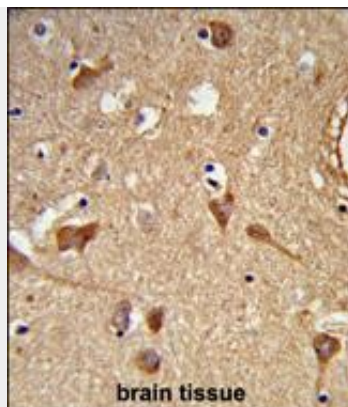
**ALDH2 Antibody - Protocols**

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

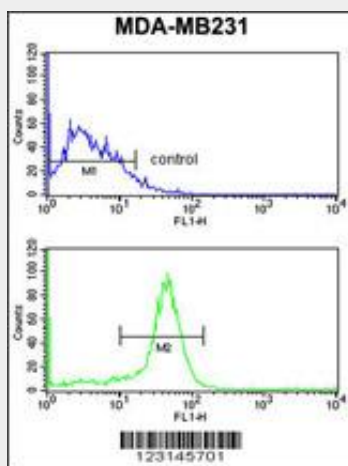
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**ALDH2 Antibody - Images**

Western blot analysis of lysates from HepG2, A549 cell line, mouse liver, mouse lung, rat liver tissue lysate (from left to right), using ALDH2 Antibody (Cat. #AW5333). AW5333 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L (HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20 µg per lane.



Formalin-fixed and paraffin-embedded human brain tissue reacted with ALDH2 Antibody, 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.



ALDH2 Antibody (Cat. #AW5333) flow cytometry analysis of MDA-MB231 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### ALDH2 Antibody - Background

ALDH2 belongs to the aldehyde dehydrogenase family of proteins. Aldehyde dehydrogenase is the second enzyme of the major oxidative pathway of alcohol metabolism. Two major liver isoforms of this enzyme, cytosolic and mitochondrial, can be distinguished by their electrophoretic mobilities, kinetic properties, and subcellular localizations. Most Caucasians have two major isozymes, while approximately 50% of Asians have only the cytosolic isozyme, missing the mitochondrial isozyme. A remarkably higher frequency of acute alcohol intoxication among Asians than among Caucasians could be related to the absence of the mitochondrial isozyme.

### ALDH2 Antibody - References

- Guo,Y.M., World J. Gastroenterol. 14 (9), 1444-1449 (2008)
- Chen,L., PLoS Med. 5 (3), E52 (2008)
- Teeguarden,J.G., Inhal Toxicol 20 (4), 375-390 (2008)
- Yoshida,A., Pharmacogenetics 2 (4), 139-147 (1992)