

ALDH2 Antibody
Rabbit Polyclonal Antibody
Catalog # ABV11297**Specification**

ALDH2 Antibody - Product Information

Application	IHC, WB
Primary Accession	P05091
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	56381

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

Positive Control	Western blot: A549 and HepG2 cell lysates, IHC: human brain tissue, FACS: MDA-MB231 cells.
Application & Usage	Western blot: ~1:1000, IHC: ~1:50-1:100, FACS: ~1:10-1:50.

Other Names

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

Target/Specificity

ALDH2

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µl of antibody in PBS with 0.09% (W/V) sodium azide

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions**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

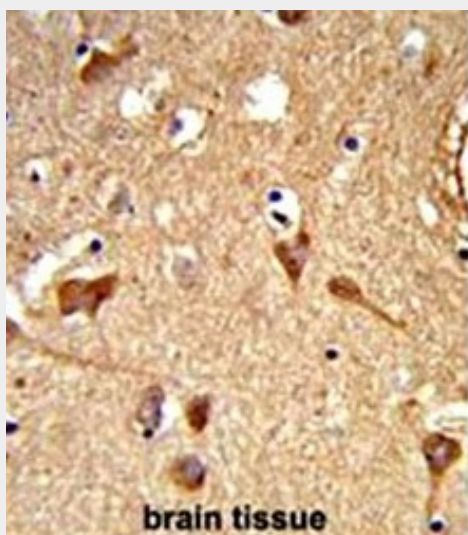
Mitochondrion matrix.

ALDH2 Antibody - Protocols

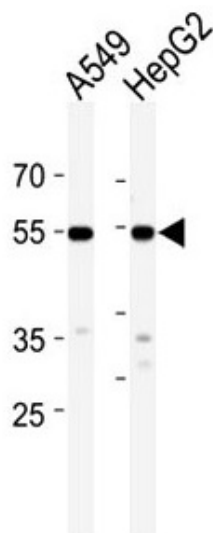
Provided below are standard protocols that you may find useful for product applications.

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

ALDH2 Antibody - Images



Formalin-fixed and paraffin-embedded human brain tissue reacted with ALDH2 antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining.



Western blot analysis in A549 and HepG2 cell lysates (35 µg/lane).

ALDH2 Antibody - Background

ALDH2 (Aldehyde dehydrogenase 2 family) belongs to the aldehyde dehydrogenase family which catalyze the chemical transformation from acetaldehyde to acetic acid and is the second enzyme of the major oxidative pathway of alcohol metabolism. Aldehyde dehydrogenases (ALDHs) mediate NADP⁺-dependent oxidation of aldehydes into acids during detoxification of alcohol-derived acetaldehyde; lipid peroxidation; and metabolism of corticosteroids, biogenic amines and neurotransmitters. ALDH1A1, also designated retinal dehydrogenase 1 (RALDH1 or RALDH1); aldehyde dehydrogenase family 1 member A1; aldehyde dehydrogenase cytosolic; ALDHIII; ALDH-E1 or ALDH E1, is a retinal dehydrogenase that participates in the biosynthesis of retinoic acid (RA). The major liver isoform ALDH1 localizes to cytosolic space, while ALDH2 localizes to the mitochondria. The ALDH1A2 (RALDH2, RALDH2-T) gene produces three different transcripts and also catalyzes the synthesis of RA from retinaldehyde. ALDH2 is present in most Caucasians, yet is absent in 50% of Asians. The absence of this enzyme has been linked to alcohol intolerance; and thusly, a reduced risk for alcoholism-related liver disease.