

# ALDH2 Antibody (Clone # 138CT22.3.8)

Mouse Monoclonal Antibody Catalog # ABV11296

## Specification

# ALDH2 Antibody (Clone # 138CT22.3.8) - Product Information

Application Primary Accession Host Clonality Isotype Calculated MW WB, IHC, IF, FC P05091 Mouse Monoclonal Mouse IgG1 56381

### ALDH2 Antibody (Clone # 138CT22.3.8) - Additional Information

Gene ID 217

Positive Control

Western blot: HepG2 cell lysates, IHC: human brain tissue, FACS: HepG2 cells, IF: HepG2 cells. Western blot: ~1:1000, IHC: ~1:50-1:100, FACS: ~1:10-1:50, IF: ~1:10-1:50.

Application & Usage

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

Target/Specificity ALDH2

Antibody Form Liquid

Appearance Colorless liquid

Formulation 100  $\mu l$  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 (Clone # 138CT22.3.8) is for research use only and not for use in diagnostic or therapeutic procedures.



## ALDH2 Antibody (Clone # 138CT22.3.8) - 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 (Clone # 138CT22.3.8) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

ALDH2 Antibody (Clone # 138CT22.3.8) - Images

#### ALDH2 Antibody (Clone # 138CT22.3.8) - 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; ALDHII; 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.