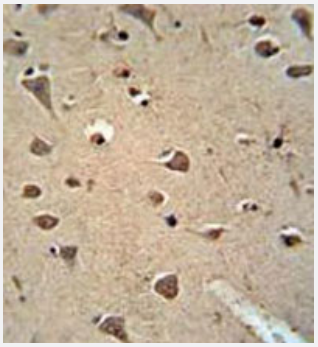
# ALDH2 monoclonal antibody, clone 138CT22.3.8

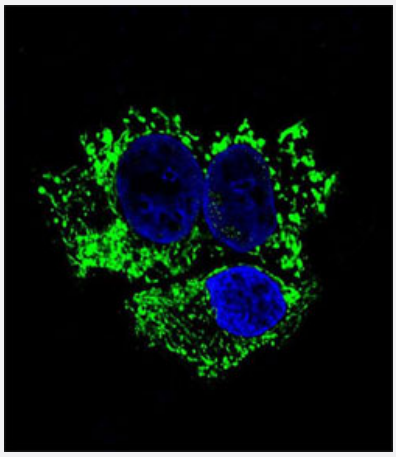
Catalog # MAB12292 Size 400 uL

## Applications



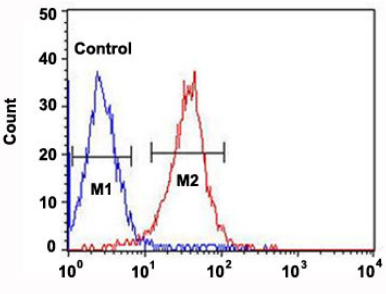
### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining of formalin-fixed and paraffin-embedded human brain tissue reacted with ALDH2 monoclonal antibody (Cat # MAB12292) at 1:50-1:100 dilution.



### Immunofluorescence

Immunofluorescent staining of HepG2 cell reacted with ALDH2 monoclonal antibody (Cat # MAB12292) at 1:10-1:50 dilution.




### Flow Cytometry

Flow cytometric analysis of HepG2 cells (right histogram) and a negative control cell (left histogram) reacted with ALDH2 monoclonal antibody (Cat # MAB12292) at 1:10-1:50 dilution.

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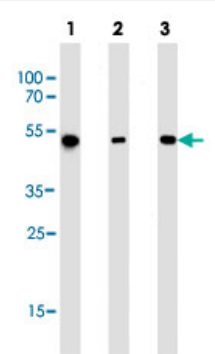


## Western Blot (Cell lysate)

Western blot analysis of Lane 1: NCI-H292 whole cell lysates Lane 2: A549 whole cell lysates Lane 3: HepG2 whole cell lysates reacted with ALDH2 monoclonal antibody (Cat # MAB12292) at 1:1000 dilution.

## Specification

| | |
|---|---|
| **Product Description** | Mouse monoclonal antibody raised against human ALDH2. |
| **Immunogen** | Recombinant protein corresponding to human ALDH2. |
| **Host** | Mouse |
| **Reactivity** | Human |
| **Form** | Liquid |
| **Purification** | Protein G purification |
| **Isotype** | IgG1, kappa |
| **Recommend Usage** | Flow Cytometry (1:10-1:50)<br>Immunohistochemistry (1:50-1:100)<br>Immunofluorescence (1:10-1:50)<br>Western Blot (1:1000)<br>The optimal working dilution should be determined by the end user. |
| **Storage Buffer** | In PBS (0.09% sodium azide) |
| **Storage Instruction** | Store at 4°C. For long term storage store at -20°C.<br>Aliquot to avoid repeated freezing and thawing. |
| **Note** | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only. |

## Applications

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- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

  Immunohistochemical staining of formalin-fixed and paraffin-embedded human brain tissue reacted with ALDH2 monoclonal antibody (Cat # MAB12292) at 1:50-1:100 dilution.

- Immunofluorescence

  Immunofluorescent staining of HepG2 cell reacted with ALDH2 monoclonal antibody (Cat # MAB12292) at 1:10-1:50 dilution.

- Flow Cytometry

  Flow cytometric analysis of HepG2 cells (right histogram) and a negative control cell (left histogram) reacted with ALDH2 monoclonal antibody (Cat # MAB12292) at 1:10-1:50 dilution.

- Western Blot (Cell lysate)

  Western blot analysis of Lane 1: NCI-H292 whole cell lysates Lane 2: A549 whole cell lysates Lane 3: HepG2 whole cell lysates reacted with ALDH2 monoclonal antibody (Cat # MAB12292) at 1:1000 dilution.

## Gene Info — ALDH2

| | |
|---|---|
| **Entrez GeneID** | 217 |
| **Gene Name** | ALDH2 |
| **Gene Alias** | ALDH-E2, ALDHI, ALDM, MGC1806 |
| **Gene Description** | aldehyde dehydrogenase 2 family (mitochondrial) |
| **Omim ID** | 100650 |
| **Gene Ontology** | Hyperlink |
| **Gene Summary** | This protein 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 isofo rms of this enzyme, cytosolic and mitochondrial, can be distinguished by their electrophoretic mob ilities, kinetic properties, and subcellular localizations. Most Caucasians have two major isozymes , while approximately 50% of Orientals have only the cytosolic isozyme, missing the mitochondrial isozyme. A remarkably higher frequency of acute alcohol intoxication among Orientals than amon g Caucasians could be related to the absence of the mitochondrial isozyme. This gene encodes a mitochondrial isoform, which has a low Km for acetaldehydes, and is localized in mitochondrial m atrix. [provided by RefSeq |
| **Other Designations** | ALDH class 2\|acetaldehyde dehydrogenase 2\|liver mitochondrial ALDH\|mitochondrial aldehyde d ehydrogenase 2\|nucleus-encoded mitochondrial aldehyde dehydrogenase 2 |

## Pathway

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- 3-Chloroacrylic acid degradation
- Arginine and proline metabolism
- Ascorbate and aldarate metabolism
- beta-Alanine metabolism
- Butanoate metabolism
- Fatty acid metabolism
- Glycerolipid metabolism
- Glycolysis / Gluconeogenesis
- Histidine metabolism
- Limonene and pinene degradation
- Lysine degradation
- Metabolic pathways
- Propanoate metabolism
- Pyruvate metabolism
- Tryptophan metabolism
- Valine

## Disease

- Acute Disease
- Adenocarcinoma
- Adenoma
- Adenomatous Polyps
- Alcohol Withdrawal Delirium
- Alcoholic Intoxication
- Alcoholic Neuropathy

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- Alcoholism
- Alcohol-Related Disorders
- Alzheimer disease
- Angina Pectoris
- Antisocial Personality Disorder
- Asthma
- Atherosclerosis
- Atrophy
- Attention Deficit Disorder with Hyperactivity
- Behavior Control
- Brain Infarction
- Breast cancer
- Breast Neoplasms
- Calcinosis
- Carcinoma
- Cardiovascular Diseases
- Carotid Artery Diseases
- Cell Transformation
- Cocarcinogenesis
- Cognition Disorders
- Colon cancer
- Colonic Neoplasms
- Colonic Polyps
- Colorectal Neoplasms
- Coronary Artery Disease
- Coronary Disease

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- Dementia
- Dermatitis
- Diabetes Mellitus
- Diabetic Angiopathies
- Diabetic Neuropathies
- Diabetic Retinopathy
- Digestive System Neoplasms
- Disease Models
- Disease Progression
- Disease Susceptibility
- Diseases in Twins
- DNA Damage
- Drug Hypersensitivity
- Ductus Arteriosus
- Ectodermal Dysplasia
- Edema
- Esophageal Neoplasms
- Fatty Liver
- Femur Head Necrosis
- Flushing
- Gastritis
- Gastrointestinal Neoplasms
- Genetic Predisposition to Disease
- Genomic Instability
- Head and Neck Neoplasms
- Heart Diseases

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- Helicobacter Infections
- Hepatitis
- Hepatitis C
- Hypersensitivity
- Hypertension
- Infant
- Kidney Failure
- Laryngeal Neoplasms
- Liver Cirrhosis
- Liver Diseases
- Liver Neoplasms
- Lung Neoplasms
- Melanosis
- Mesothelioma
- Metabolic Syndrome X
- Metaplasia
- Micronuclei
- Mouth Neoplasms
- Myocardial Infarction
- Neoplasm Invasiveness
- Neoplasm Metastasis
- Neoplasms
- Neuropsychological Tests
- Obesity
- Obstetric Labor

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- Occupational Diseases
- Oropharyngeal Neoplasms
- Osteonecrosis
- Osteoporosis
- Pancreatic cancer
- Pancreatic Neoplasms
- Pancreatitis
- Peptic Ulcer
- Perception
- Periodontal Pocket
- Periodontitis
- Pharyngeal Neoplasms
- Pleural Neoplasms
- Precancerous Conditions
- Pregnancy Complications
- Prostatic Neoplasms
- Psychiatric Status Rating Scales
- Psychology
- Psychomotor Performance
- Pulmonary Disease
- Reaction Time
- Rectal Neoplasms
- Retinopathy of Prematurity
- Schizophrenia
- Sensation
- Set (Psychology)

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- Stomach Neoplasms
- Substance Withdrawal Syndrome
- Unconsciousness
- Urinary Bladder Neoplasms
- Werner syndrome
- Wounds and Injuries

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