

Anti-ALDH2 Monoclonal Antibody

Catalog # ABO14695

Specification

Anti-ALDH2 Monoclonal Antibody - Product Information

Application WB, IHC, IF, ICC, IP **Primary Accession** P05091 Rabbit Host Isotype Rabbit IgG Reactivity Rat, Human, Mouse Monoclonal Clonality Format Liquid Description Anti-ALDH2 Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP applications. This antibody reacts with Human, Mouse, Rat.

Anti-ALDH2 Monoclonal Antibody - Additional Information

Gene ID 217

Other Names Aldehyde dehydrogenase, mitochondrial, 1.2.1.3, ALDH class 2, ALDH-E2, ALDHI, ALDH2, ALDM

Application Details WB 1:500-1:2000
IHC 1:50-1:200
ICC/IF 1:50-1:200
IP 1:50

Contents Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human ALDH2 Alcohol metabolism; ethanol degradation; acetate from ethanol: step 2/2.

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-ALDH2 Monoclonal Antibody - Protein Information

Name ALDH2

Synonyms ALDM



Function

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

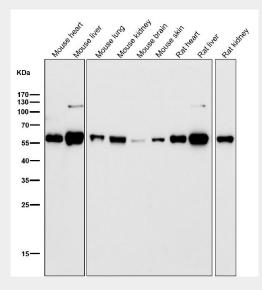
Cellular Location Mitochondrion matrix.

Anti-ALDH2 Monoclonal Antibody - Protocols

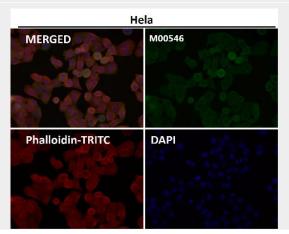
Provided below are standard protocols that you may find useful for product applications.

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

Anti-ALDH2 Monoclonal Antibody - Images

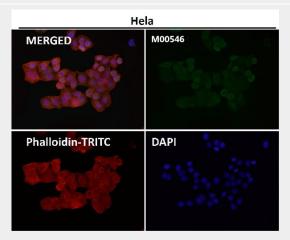


All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.





Immunofluorescent analysis using the Antibody at 1:50 dilution.



Immunofluorescent analysis using the Antibody at 1:150 dilution.

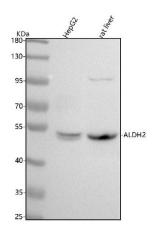


Figure 1. Western blot analysis of ALDH2 using anti-ALDH2 antibody (M00546).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HepG2 whole cell lysates,

Lane 2: rat liver tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-ALDH2 antigen affinity purified monoclonal antibody (Catalog # M00546) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for ALDH2 at approximately 52 kDa. The expected band size for ALDH2 is at 56 kDa.