

Anti-ALDH3A1 Antibody

Catalog # ABO11380

Specification

Anti-ALDH3A1 Antibody - Product Information

ApplicationWB, IHC-PPrimary AccessionP30838HostRabbitReactivityHumanClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Aldehyde dehydrogenase, dimeric NADF

Rabbit IgG polyclonal antibody for Aldehyde dehydrogenase, dimeric NADP-preferring(ALDH3A1) detection. Tested with WB, IHC-P in Human.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-ALDH3A1 Antibody - Additional Information

Gene ID 218

Other Names Aldehyde dehydrogenase, dimeric NADP-preferring, 1.2.1.5, ALDHIII, Aldehyde dehydrogenase 3, Aldehyde dehydrogenase family 3 member A1, ALDH3A1, ALDH3

Calculated MW 50395 MW KDa

Application Details Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, By Heat
blot, 0.1-0.5 μ g/ml, Human
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Subcellular Localization Cytoplasm.

Tissue Specificity High levels in stomach, esophagus and lung; low level in the liver and kidney.

Protein Name Aldehyde dehydrogenase, dimeric NADP-preferring

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human ALDH3A1(440-453aa KVRYPPSPAKMTQH).



Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Anti-ALDH3A1 Antibody - Protein Information

Name ALDH3A1

Synonyms ALDH3

Function

ALDHs play a major role in the detoxification of alcohol- derived acetaldehyde (Probable). They are involved in the metabolism of corticosteroids, biogenic amines, neurotransmitters, and lipid peroxidation (Probable). Oxidizes medium and long chain aldehydes into non-toxic fatty acids (PubMed:1737758). Preferentially oxidizes aromatic aldehyde substrates (PubMed:1737758). Comprises

about 50 percent of corneal epithelial soluble proteins (By similarity). May play a role in preventing corneal damage caused by ultraviolet light (By similarity).

Cellular Location Cytoplasm {ECO:0000250|UniProtKB:P47739}.

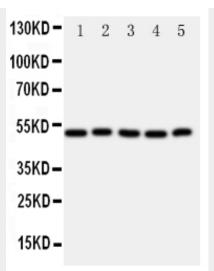
Tissue Location High levels in stomach, esophagus and lung; low level in the liver and kidney

Anti-ALDH3A1 Antibody - Protocols

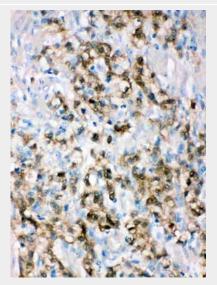
Provided below are standard protocols that you may find useful for product applications.

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

Anti-ALDH3A1 Antibody - Images



Anti-ALDH3A1 antibody, ABO11380, Western blottingAll lanes: Anti ALDH3A1 (ABO11380) at 0.5ug/mlLane 1: SMMC Whole Cell Lysate at 40ugLane 2: HELA Whole Cell Lysate at 40ugLane 3: COLO320 Whole Cell Lysate at 40ugLane 4: MCF-7 Whole Cell Lysate at 40ugLane 5: A549 Whole Cell Lysate at 40ugPredicted bind size: 50KDObserved bind size: 50KD



Anti-ALDH3A1 antibody, ABO11380, IHC(P)IHC(P): Human Gastric Cancer Tissue

Anti-ALDH3A1 Antibody - Background

ALDH3A1(Aldehyde Dehydrogenase, Family 3, Subfamily A, Member 1), also known as ALDH3, is an enzyme that in humans is encoded by the ALDH3A1 gene. By in situ hybridization, Hiraoka et al.(1995) mapped the ALDH3 gene to 17p11.2. ALDHs play a major role in the detoxification of alcohol-derived acetaldehyde. They are involved in the metabolism of corticosteroids, biogenic amines, neurotransmitters, and lipid peroxidation. This protein preferentially oxidizes aromatic aldehyde substrates. It may play a role in the oxidation of toxic aldehydes.