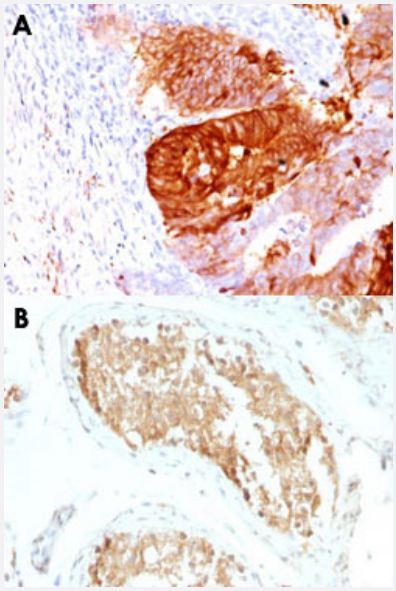
ALDH1A1 monoclonal antibody, clone ALDH1A1/1381

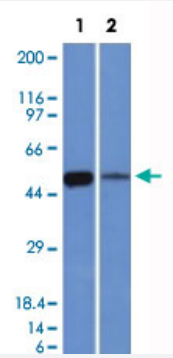
Catalog # MAB14520 Size 100 ug

Applications



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

Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of human colon carcinoma (A) and human testicular carcinoma (B) with ALDH1A1 monoclonal antibody, clone ALDH1A1/1381 (Cat # MAB14520).



Western Blot

Western Blot analysis of Lane 1: K562 and Lane 2: lung lysates with ALDH1A1 monoclonal antibody, clone ALDH1A1/1381 (Cat # MAB14520).

Specification

Product Description	Mouse monoclonal antibody raised against partial recombinant human ALDH1A1.
Immunogen	Recombinant protein corresponding to amino acids 315-434 of human ALDH1A1.
Host	Mouse

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Theoretical MW (kDa)	56
Reactivity	Human
Form	Liquid
Purification	Protein A/G purification
Isotype	IgG1
Recommend Usage	Flow Cytometry (0.5-1 ug/10^6 cells) Immunofluorescence (1-2 ug/mL) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (0.5-1 ug/mL) Western Blotting (0.5-1 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In 10 mM PBS (0.05% BSA, 0.05% sodium azide).
Storage Instruction	Store at 4°C.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

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

  Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of human colon carcinoma (A) and human testicular carcinoma (B) with ALDH1A1 monoclonal antibody, clone ALDH1A1/1381 (Cat # MAB14520).

- Immunofluorescence
- Flow Cytometry
- Western Blot

  Western Blot analysis of Lane 1: K562 and Lane 2: lung lysates with ALDH1A1 monoclonal antibody, clone ALDH1A1/1381 (Cat # MAB14520).

Gene Info — ALDH1A1

Entrez GeneID	216
Protein Accession#	P00352
Gene Name	ALDH1A1

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Gene Alias	ALDC, ALDH-E1, ALDH1, ALDH11, MGC2318, PUMB1, RALDH1
Gene Description	aldehyde dehydrogenase 1 family, member A1
Gene Ontology	Hyperlink
Gene Summary	This protein belongs to the aldehyde dehydrogenases family of proteins. Aldehyde dehydrogenase is the second enzyme of the major oxidative pathway of alcohol metabolism. Two major liver isoforms of this enzyme, cytosolic and mitochondrial, can be distinguished by their electrophoretic mobilities, 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 among Caucasians could be related to the absence of the mitochondrial isozyme. This gene encodes a cytosolic isoform, which has a high affinity for aldehydes. [provided by RefSeq
Other Designations	ALDH class 1|acetaldehyde dehydrogenase 1|aldehyde dehydrogenase 1, soluble|aldehyde dehydrogenase 1A1|aldehyde dehydrogenase, liver cytosolic|retinal dehydrogenase 1|retinaldehyde dehydrogenase 1

Publication Reference

- Comparison of quantum dot technology with conventional immunohistochemistry in examining aldehyde dehydrogenase 1A1 as a potential biomarker for lymph node metastasis of head and neck cancer.

  Xu J, Müller S, Nannapaneni S, Pan L, Wang Y, Peng X, Wang D, Tighiouart M, Chen Z, Saba NF, Beitler JJ, Shin DM, Chen ZG.

  European Journal of Cancer 2012 Jul; 48(11):1682.

  Application: IF, IHC-P, WB-Tr, Human, A-549 cells, Human head and neck cancer

Pathway

- Metabolic pathways
- Retinol metabolism

Disease

- Alcoholism
- Breast cancer
- Breast Neoplasms
- Carcinoma

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- Chromosome Deletion
- Cleft Lip
- Cleft Palate
- Disease Models
- Drug Toxicity
- Genetic Predisposition to Disease
- Kidney Failure
- Lymphoma
- Neoplasms
- Ovarian cancer
- Ovarian Neoplasms
- Schizophrenia
- Tobacco Use Disorder

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