

Mouse anti-Human ALDH1A1 Monoclonal Antibody | anti-ALDH1A1 antibody

ALDH1A1 (N-terminal region) M562 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA71563	Mouse	Human	Immunocytochemistry, ELISA, Western Blot

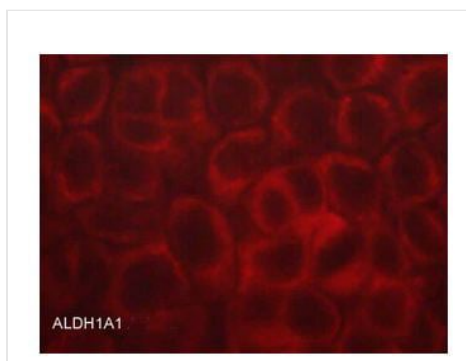
PRODUCT SYNONYMS

ALDH1A1; Monoclonal Antibody; ALDH1A1 (N-terminal region) M562 Antibody; ALDH1A1 (N-terminal region); ALDH1A1 M562; anti-ALDH1A1 antibody

PRODUCT SPECIFICATIONS

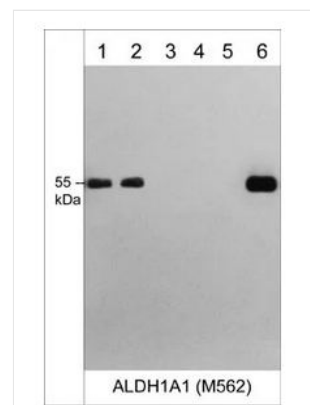
Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG2a
Clone Number	M562
Specificity	The antibody was purified by Protein G chromatography. This antibody detects a 55kDa* protein on SDS-PAGE immunoblots of human A431, HepG2, and mouse liver, as well as human recombinant ALDH1A1. The antibody does not detect ALDH1A3 in PC3 cells, ALDH1A2 in Jurkat cells, and bovine tubulin (55kDa).
Purity/Purification	Protein G chromatography
Form/Format	Mouse monoclonal purified with protein G chromatography is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-ALDH1A1 antibody	ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Immunogen	Clone M562 was generated from a recombinant protein corresponding to amino acids in the N-terminal region from human ALDH1A1.
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



ICC (Immunocytochemistry)

Immunocytochemical labeling of ALDH1A1 in aldehyde fixed and NP-40 permeabilized human A431 cells. The cells were labeled with mouse monoclonal anti-ALDH1A1 (AM5621). The antibody was detected using goat anti-mouse DyLight 594.



WB (Western Blot)

Western blot image of human A431 (lane 1), HepG2 (lane 2), PC3 (lane 3), Jurkat (lane 4), bovine tubulin (lane 5), and recombinant human ALDH1A1 (lane 6). The blot was probed with mouse monoclonal ALDH1A1 M562 (lanes 1-6) at a dilution of 1:1,000.

ADDITIONAL INFORMATION

Related Product Information for anti-ALDH1A1 antibody	Aldehyde dehydrogenase (ALDH) superfamily is a ubiquitous group of enzymes found in all taxonomic domains. ALDH detoxifies endogenous and exogenous aldehydes, protecting cellular homeostasis and organismal functions. These enzymes are necessary for the synthesis of retinoic acid, betaine, and folate. Recent studies have reported high levels of ALDH found in cancer cells, suggesting that ALDH can act as a marker for cancer cells found in a wide variety of tissues including skin, prostate, lung, and neural tissues. Additionally, certain diseases can be identified when ALDH activity is absent. ALDH1A1 is vital for retinol synthesis and alcohol metabolism. ALDH1A1 active sites include an active cysteine residue, which catalyses the transformation of aldehydes into their respective carboxylic groups. ALDH1A1 amino acid sequence and function is highly conserved in humans and rodents.
References	Luo, Y. et al. (2012) Stem Cells. 30(10):2100. Jackson, B. et al. (2011) Hum Genomics. 5(4):283. Edenberg, H.J. (2007) Alcohol Res Health. 30(1):5. Duester, G. (2000) Eur J Biochem. 267(14):4315.

NCBI AND UNIPROT INFORMATION

NCBI GI #	118495
NCBI GeneID	216
UniProt Accession #	P00352; O00768; Q5SYR1
Molecular Weight	501
NCBI Official Full Name	Retinal dehydrogenase 1
NCBI Official Synonym Full Names	aldehyde dehydrogenase 1 family, member A1
NCBI Official Symbol	ALDH1A1
NCBI Official Synonym Symbols	ALDC; ALDH1; HEL-9; HEL12; PUMB1; ALDH11; RALDH1; ALDH-E1; HEL-S-53e
NCBI Protein Information	retinal dehydrogenase 1; ALHDII; RALDH 1; ALDH class 1; acetaldehyde dehydrogenase 1; epididymis luminal protein 9; epididymis luminal protein 12; retinaldehyde dehydrogenase 1; aldehyde dehydrogenase 1, soluble; aldehyde dehydrogenase, liver cytosolic; e
UniProt Protein Name	Retinal dehydrogenase 1
UniProt Gene Name	ALDH1A1
UniProt Synonym Gene Names	ALDC; ALDH1; PUMB1; RALDH 1; RaIDH1
UniProt Entry Name	AL1A1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/aldh1a1-antibody-clone-m562-immunocytochemistry-western-blot-elisa/71563>