

Mouse anti-Human ALDH2 Monoclonal Antibody | anti-ALDH2 antibody

ALDH2 Antibody

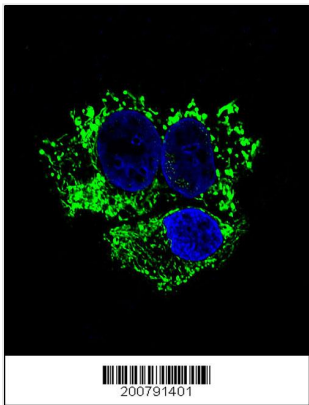
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA283593	Mouse	Human	Western Blot, Immunofluorescence, Flow Cytometry, Functional Assay, Immunohistochemistry, ELISA

PRODUCT SYNONYMS

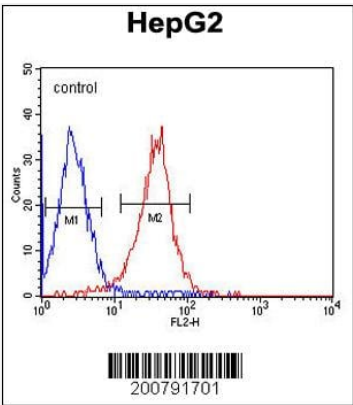
ALDH2; Monoclonal Antibody; ALDH2 Antibody; Aldehyde dehydrogenase; mitochondrial; ALDH class 2; ALDH-E2; ALDHI; ALDM; anti-ALDH2 antibody

PRODUCT SPECIFICATIONS

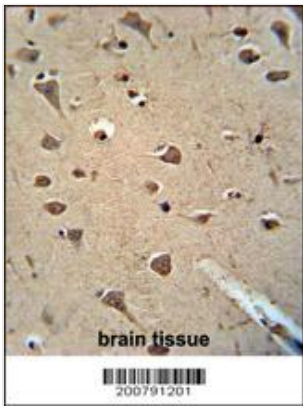
Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1,Igkappa
Clone Number	138CT22.3.8
Specificity	This ALDH2 Monoclonal antibody is generated from mouse immunized with ALDH2 recombinant protein.
Purity/Purification	Purified Mouse Monoclonal Antibody (Mab)
Form/Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Concentration	Vial Concentration: 0.5 (varies by lot)
Sequence Length	517
Applicable Applications for anti-ALDH2 antibody	WB (Western Blot), IF (Immunofluorescence), FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), ELISA
Antigen Type	Recombinant Protein
Crown Antibody	Yes
Antigen Source	HUMAN
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.



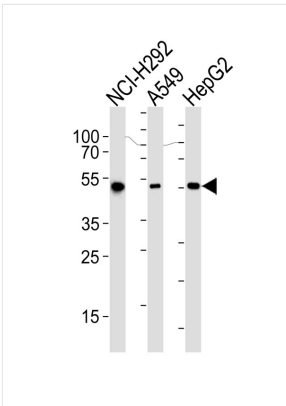
IF (Immunofluorescence)
Confocal immunofluorescent analysis of ALDH2 Antibody with HepG2 cell followed by Alexa Fluor 488-conjugated goat anti-mouse IgG (green). DAPI was used to stain the cell nuclear (blue).



FCM/FACS (Flow Cytometry)
ALDH2 Monoclonal Antibody flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram).PE-conjugated goat-anti-mouse secondary antibodies were used for the analysis.



IHC (Immunohistochemistry)
ALDH2 Monoclonal Antibody immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the ALDH2 Monoclonal Antibody for immunohistochemistry. Clinical relevance has not been evaluated.



WB (Western Blot)
Western blot analysis of lysates from NCI-H292, A549, HepG2 cell line (from left to right), using ALDH2 Antibody. AAA283593 was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:3000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

ADDITIONAL INFORMATION

Related Product Information for anti-ALDH2 antibody	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 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 mitochondrial isoform, which has a low Km for acetaldehydes, and is localized in mitochondrial matrix.
Product Categories/Family for anti-ALDH2 antibody	Crown Antibodies; Cardiovascular; Metabolism; Signal Transduction
References	Relationship between genetic polymorphisms of ALDH2 and ADH1B and esophageal cancer risk: a meta-analysis. Yang SJ, et al. World J Gastroenterol, 2010 Sep 7. PMID 20806441. Effects of alcohol-drinking behaviour and ADH1B and ALDH2 polymorphisms on basal DNA damage in human mononuclear cells as determined by the comet assay. Weng H, et al. Mutat Res, 2010 Aug 30. PMID 20685249. Evaluation of a brief web-based genetic feedback intervention for reducing alcohol-related health risks associated with ALDH2. Hendershot CS, et al. Ann Behav Med, 2010 Aug. PMID 20652463. Association of genetic polymorphisms of aldehyde dehydrogenase-2 with esophageal squamous cell dysplasia. Zhou YZ, et al. World J Gastroenterol, 2010 Jul 21. PMID 20632450. Variation at the NFATC2 Locus Increases the Risk of Thiazolidinedione-Induced Edema in the Diabetes REDuction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

NCBI AND UNIPROT INFORMATION

NCBI GI #	25777732
NCBI GeneID	217
NCBI Accession #	NP_000681.2; NP_001191818.1
NCBI GenBank Nucleotide #	NM_000690.3
UniProt Accession #	P05091; Q03639; Q6IB13; Q6IV71; B4DW54; E7EUE5
Molecular Weight	56381
NCBI Official Full Name	aldehyde dehydrogenase, mitochondrial isoform 1
NCBI Official Synonym Full Names	aldehyde dehydrogenase 2 family (mitochondrial)
NCBI Official Symbol	ALDH2
NCBI Official Synonym Symbols	ALDM; ALDHI; ALDH-E2
NCBI Protein Information	aldehyde dehydrogenase, mitochondrial
UniProt Protein Name	Aldehyde dehydrogenase, mitochondrial
UniProt Gene Name	ALDH2
UniProt Synonym Gene Names	ALDM
UniProt Entry Name	ALDH2_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/aldh2-antibody-clone-138ct22-3-8-western-blot-immunofluorescence-flow-cytometry-immunohistochemistry-elisa/283593>