

Catalog: OM638959



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Aldh1A1

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Product profile

Product name Aldh1A1

Antibody Type Primary Antibodies

Product description

Aldehyde dehydrogenases (ALDHs) mediate NADP+-dependent oxidation of aldehydes into acids during the detoxification of alcohol-derived acetaldehyde; metabolism of corticosteroids, biogenic amines and n eurotransmitters; and lipid peroxidation. ALDH1A1, also designated retinal dehydrogenase 1 (RalDH1 or R ALDH1), aldehyde dehydrogenase family 1 member A1, aldehyde dehydrogenase cytosolic, ALDHII, ALDH -E1 or ALDH E1, is a retinal dehydrogenase that participates in the biosynthesis of retinoic acid (RA). The re are two major liver isoforms of ALDH1 that can localize to cytosolic or mitochondrial space. The ALDH 1A2 (RALDH2, RALDH2-T) gene produces three different transcripts and also catalyzes the synthesis of RA from retinaldehyde. ALDH1A3 (ALDH6, RALDH3, ALDH1A6) is a 37 kb gene that consists of 13 exons and produces a major transcript of approximately 3.5 kb most abundant in salivary gland, stomach and kid ney. ALDH3A1 (stomach type, ALDH3, ALDHIII) forms a cytoplasmic homodimer that preferentially oxidize s aromatic aldehyde substrates. ALDH genes upregulate as a part of the oxidative stress response, and a ppear to be abundant in certain tumors that have an accelerated metabolism toward chemotherapy agen ts.

Peptide

Key Feature

Immunogen

Clonality Polyclonal

Isotype IgG

Host Species Rabbit

Tested Applications WB ,ICC ,IHC ,FC

Species Reactivity Human Mouse Rat

Concentration 1 mg/mL.

Target Information

yde dehydrogenase 1 family member A1 antibody Aldehyde dehydrogenase 1 soluble antibody Aldehyde dehydrogenase 1 soluble antibody Aldehyde dehydrogenase cytosolic antibody Aldehyde dehydrogenase cytosolic antibody Aldehyde dehydrogenase liver cytosolic antibody Aldehyde dehydrogenase liver cytosolic antibody ALDH 1 antibody ALDH 1A1 antibody ALDH class 1 antibody ALDH, liver cytosolic antibody ALDH-E 1 antibody ALDH1 A1 antibody ALDH1 antibody ALDH11 antibody ALDH1A1 antibody ALHDII antibody cy tosolic antibody epididymis luminal protein 12 antibody epididymis luminal protein 9 antibody epididymis s ecretory sperm binding protein Li 53e antibody HEL-S-53e antibody MGC2318 antibody PUMB1 antibody RALDH 1 antibody RalDH1 antibody Retinal dehydrogenase 1 antibody

Molecular Weight (MW)

55 kDa

Cellular Localization

Cytoplasm.

Database Links

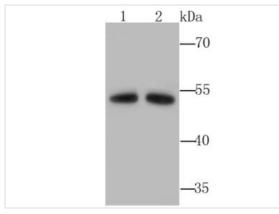
SwissProt ID

P00352

P24549

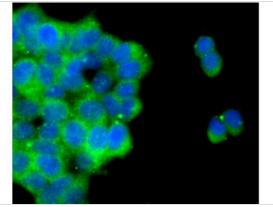
P51647

Application



Application

Fig1: Western blot analysis of Aldh1A1 on 2 liver (1) and 2 kidney (2) tissue lysates using anti-Aldh1A1 antibody at 1/1,000 dilution.

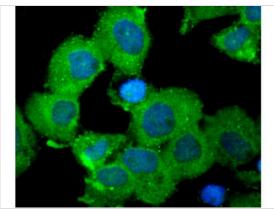


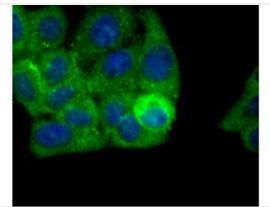
Application

Fig2: ICC staining Aldh1A1 in 293T cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

Application

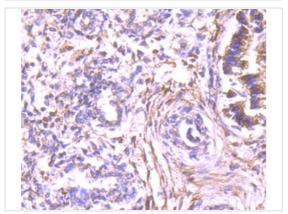
Fig3: ICC staining Aldh1A1 in A431 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.





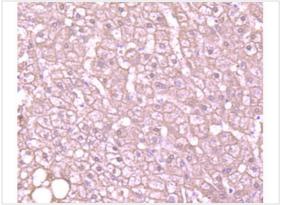
Application

Fig4: ICC staining Aldh1A1 in HepG2 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



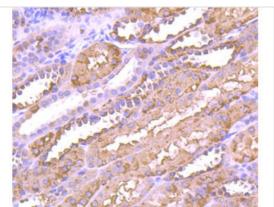
Application

Fig5: Immunohistochemical analysis of paraffin-embedded human lung tissue using anti-Aldh1A1 antibody. Counter stained with hematoxylin.



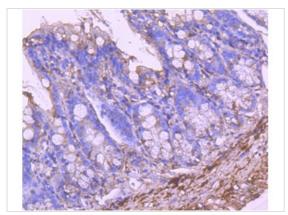
Application

 $Fig 6: Immun ohistochemical\ analysis\ of\ paraffin-embedded\ human\ liver\ tissue\ using\ anti-Aldh 1A1\ antibody.\ Counter\ stained\ with\ hematoxylin.$



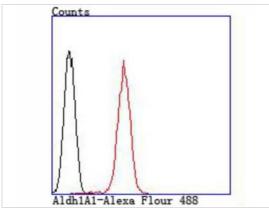
Application

Fig7: Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-Aldh1A1 antibody. Counter stained with hematoxylin.



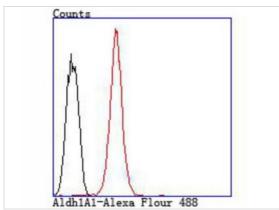
Application

Fig8: Immunohistochemical analysis of paraffin-embedded 2 colon tissue using anti-Aldh1A1 antibody. Counter stained with hematoxylin.



Application

Fig9: Flow cytometric analysis of A549 cells with Aldh1A1 antibody at 1/100 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody;black).



Application

Fig10: Flow cytometric analysis of HepG2 cells with Aldh1A1 antibody at 1/100 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black).

Positive Control 2 liver tissue lysate, 2 kidney tissue lysate, 293T, A431, HepG2, human liver tissue, human lung tissue, hu

man kidney tissue, 2 colon tissue, A549.

Application Notes WB:1:500-1:1000

ICC:1:50-1:200 IHC:1:50-1:200 FC:1:50-1:200

Additional Information

Form	Liquid
Storage Instructions	Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage Buffer	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Note	The product is for research use only not for use in diagnostic or therapeutic procedures

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This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt