

Rabbit anti-Human ALDH7A1 Polyclonal Antibody | anti-ALDH7A1 antibody

Anti-ALDH7A1 Antibody, Rabbit Polyclonal

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA255438	Rabbit	Human	Immunoprecipitation, Immunohistochemistry, ELISA, Western Blot

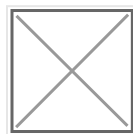
PRODUCT SYNONYMS

ALDH7A1; Polyclonal Antibody; Anti-ALDH7A1 Antibody; Rabbit Polyclonal; ALDH7A1/ATQ1 Antibody; Rabbit PAb; Antigen Affinity Purified; aldehyde dehydrogenase 7 family; member A1; Anti-ATQ1 Antibody; Anti-EPD Antibody; Anti-PDE Antibody; anti-ALDH7A1 antibody

PRODUCT SPECIFICATIONS

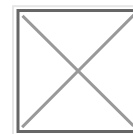
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Human ALDH7A1/ATQ1
Purity/Purification	Protein A & Antigen Affinity
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-ALDH7A1 antibody	IP (Immunoprecipitation), IHC (Immunohistochemistry), ELISA, WB (Western Blot)
Immunogen	Recombinant Human ALDH7A1 protein
Conjugation	Unconjugated
Preparation	Produced in rabbits immunized with purified, recombinant Human ALDH7A1 (rh ALDH7A1). ALDH7A1 specific IgG was purified by human ALDH7A1 affinity chromatography .
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.

IMAGES



WB (Western Blot)

Anti-ALDH7A1 rabbit polyclonal antibody at 1:500 dilution Lane A: HepG2 Whole Cell Lysate Lane B: SH-SY5Y Whole Cell Lysate Lane C: 293T Whole Cell Lysate Lysates/proteins at 30 ug per lane. Secondary Goat Anti-Rabbit IgG H&L (Dylight800) at 1/10000 dilution. Developed using the Odyssey technique. Performed under reducing conditions. Predicted band size: 58 kDa Observed band size: 58 kDa (We are unsure as to the identity of these extra bands).



IP (Immunoprecipitation)

ALDH7A1 was immunoprecipitated using: Lane A: 0.5 mg Hela Whole Cell Lysate 0.5 uL anti-ALDH7A1 rabbit polyclonal antibody and 15 ul of 50 % Protein G agarose. Primary antibody: Anti-ALDH7A1 rabbit polyclonal antibody, at 1:500 dilution Secondary antibody: Clean-Blot IP Detection Reagent (HRP) at 1:1000 dilution Developed using the DAB staining technique. Performed under reducing conditions. Predicted band size: 55 kDa Observed band size: 55 kDa

**IHC (Immunohistochemistry)**

Immunochemical staining of human ALDH7A1 in human hepatoma (from 3 donors) with rabbit polyclonal antibody at 1:25000 dilution, formalin-fixed paraffin embedded sections.

**IHC (Immunohistochemistry)**

Immunochemical staining of human ALDH7A1 in human liver (from 2 donors) with rabbit polyclonal antibody at 1:25000 dilution, formalin-fixed paraffin embedded sections. The image showing positive staining of hepatocyte.

ADDITIONAL INFORMATION

Related Product Information for anti-ALDH7A1 antibody	ALDH7A1 (Aldehyde dehydrogenase 7 family, member A1) is a member of subfamily 7 in the aldehyde dehydrogenase family. These enzymes are thought to play a major role in the detoxification of aldehydes generated by alcohol metabolism and lipid peroxidation. Mammalian ALDH7A1 is homologous to plant ALDH7B1 which protects against various forms of stress such as increased salinity, dehydration and treatment with oxidants or pesticides. In mammals, ALDH7A1 is known to play a primary role during lysine catabolism through the NAD ⁺ -dependent oxidative conversion of aminoadipate semialdehyde (AASA) to its corresponding carboxylic acid, alpha-aminoadipic acid. Deleterious mutations in human ALDH7A1 are responsible for pyridoxine-dependent and folinic acid-responsive seizures. ALDH7A1 is a novel aldehyde dehydrogenase expressed in multiple subcellular compartments that protects against hyperosmotic stress by generating osmolytes and metabolizing toxic aldehydes.
References	Brocker C, et al. (2011) Aldehyde dehydrogenase 7A1 (ALDH7A1) attenuates reactive aldehyde and oxidative stress induced cytotoxicity. Chem Biol Interact. 191(1-3): 269-77. Brocker C, et al. (2010) Aldehyde dehydrogenase 7A1 (ALDH7A1) is a novel enzyme involved in cellular defense against hyperosmotic stress. J Biol Chem. 285(24): 18452-63.

NCBI AND UNIPROT INFORMATION

NCBI GI #	188035924
NCBI GeneID	501
NCBI Accession #	NP_001173.2
NCBI GenBank Nucleotide #	NM_001182.4
UniProt Accession #	P49419; O14619; Q6IPU8; Q9BUL4; B2R669; B4DIC7; B4DMA0; E7EPT3
Molecular Weight	51,411 Da
NCBI Official Full Name	alpha-aminoadipic semialdehyde dehydrogenase isoform 1
NCBI Official Synonym Full Names	aldehyde dehydrogenase 7 family member A1
NCBI Official Symbol	ALDH7A1
NCBI Official Synonym Symbols	EPD; PDE; ATQ1
NCBI Protein Information	alpha-aminoadipic semialdehyde dehydrogenase
UniProt Protein Name	Alpha-aminoadipic semialdehyde dehydrogenase
UniProt Gene Name	ALDH7A1
UniProt Synonym Gene Names	ATQ1; Alpha-AASA dehydrogenase; P6c dehydrogenase

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/polyclonal/aldh7a1-antibody-immunoprecipitation-immunohistochemistry-western-blot-elisa/255438>