

Rabbit anti-Human ALDH4A1 Monoclonal Antibody | anti-ALDH4A1 antibody

Recombinant Anti-ALDH4A1 Antibody, Rabbit Monoclonal

CATALOG # AAA255609	HOST Rabbit	REACTIVITY Human	APPLICATIONS Immunoprecipitation, Western Blot
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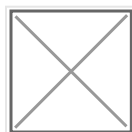
PRODUCT SYNONYMS

ALDH4A1; Monoclonal Antibody; Recombinant Anti-ALDH4A1 Antibody; Rabbit Monoclonal; ALDH4A1 Antibody; Rabbit MAb; aldehyde dehydrogenase 4 family; member A1; Anti-ALDH4 Antibody; Anti-P5CD Antibody; Anti-P5CDh Antibody; anti-ALDH4A1 antibody

PRODUCT SPECIFICATIONS

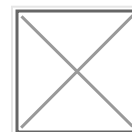
Host	Rabbit
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Number	001
Specificity	Human ALDH4A1
Purity/Purification	Protein A
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-ALDH4A1 antibody	IP (Immunoprecipitation), WB (Western Blot)
Antibody Type	Recombinant Antibody
Immunogen	Recombinant Human ALDH4A1 Protein
Conjugation	Unconjugated
Preparation	This antibody was obtained from a rabbit immunized with purified, recombinant Human ALDH4A1 (rh ALDH4A1).
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-ALDH4A1 rabbit monoclonal antibody at 1:500 dilution Lane A: HepG2 Whole Cell Lysate Lane B: K562 Whole Cell Lysate Lane C: A549 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: 62 kDa Observed band size: 62 kDa (We are unsure as to the identity of these extra bands).



IP (Immunoprecipitation)

ALDH4A1 was immunoprecipitated using: Lane A: 0.5 mg HepG2 Whole Cell Lysate 2 uL anti-ALDH4A1 rabbit monoclonal antibody and 60 ug of Immunomagnetic beads Protein G. Primary antibody: Anti-ALDH4A1 rabbit monoclonal antibody, at 1:100 dilution Secondary antibody: Dylight 800-labeled antibody to rabbit IgG (H+L), at 1:5000 dilution Developed using the odssey technique. Performed under reducing conditions. Predicted band size: 62 kDa Observed band size: 62 kDa

ADDITIONAL INFORMATION

Related Product Information for anti-ALDH4A1 antibody	ALDH4A1 is a member of the aldehyde dehydrogenase family. Aldehyde dehydrogenase enzymes function in the metabolism of many molecules including certain fats (cholesterol and other fatty acids) and protein building blocks (amino acids). Additional aldehyde dehydrogenase enzymes detoxify external substances, such as alcohol and pollutants, and internal substances, such as toxins that are formed within cells. ALDH4A1 is expressed abundantly in liver followed by skeletal muscle, kidney, heart, brain, placenta, lung and pancreas. It is a mitochondrial matrix NAD-dependent dehydrogenase which catalyzes the second step of the proline degradation pathway, converting pyrroline-5-carboxylate to glutamate. Defects in ALDH4A1 are the cause of hyperprolinemia type 2 (HP-2). HP-2 is characterized by the accumulation of delta-1-pyrroline-5-carboxylate (P5C) and proline. The disorder may be causally related to neurologic manifestations, including seizures and mental retardation.
References	Goodman SI, et al. (1974) Defective hydroxyproline metabolism in type II hyperprolinemia. Biochemical medicine. 10 (4): 329-36.Maruyama K, et al. (1994) Oligo-capping: a simple method to replace the cap structure of eukaryotic mRNAs with oligoribonucleotides. Gene. 138 (1-2): 171-4.Vasiliou V, et al. (2005) Analysis and update of the human aldehyde dehydrogenase (ALDH) gene family. Hum Genomics. 2 (2): 138-43.

NCBI AND UNIPROT INFORMATION

NCBI GI #	14043187
NCBI GeneID	8659
Molecular Weight	56,043 Da
NCBI Official Full Name	Aldehyde dehydrogenase 4 family, member A1
NCBI Official Synonym Full Names	aldehyde dehydrogenase 4 family member A1
NCBI Official Symbol	ALDH4A1
NCBI Official Synonym Symbols	P5CD; ALDH4; P5CDh
NCBI Protein Information	delta-1-pyrroline-5-carboxylate dehydrogenase, mitochondrial

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/aldh4a1-antibody-clone-001-immunoprecipitation-western-blot-elisa/255609>