

Rabbit ALDH1A3 Polyclonal Antibody | anti-ALDH1A3 antibody

Anti-ALDH1A3 Picoband Antibody

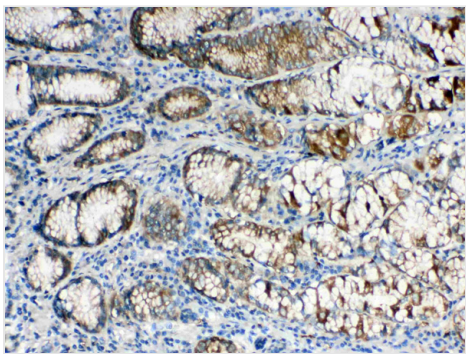
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA124702	Rabbit	Human, Mouse, Rat No cross reactivity with other proteins	Western Blot, Immunohistochemistry

PRODUCT SYNONYMS

ALDH1A3; Polyclonal Antibody; Anti-ALDH1A3 Picoband Antibody; Aldehyde dehydrogenase family 1 member A3; 1.2.1.5; Aldehyde dehydrogenase 6; Retinaldehyde dehydrogenase 3; RALDH-3; RaLDH3; ALDH6; anti-ALDH1A3 antibody

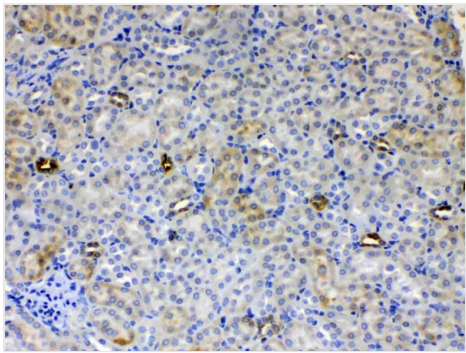
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat No cross reactivity with other proteins
Clonality	Polyclonal
Purity/Purification	Immunogen affinity purified
Form/Format	Lyophilized
Concentration	Add 0.2ml of distilled water will yield a concentration of 500ug/ml. (varies by lot)
Sequence Length	512
Applicable Applications for anti-ALDH1A3 antibody	WB (Western Blot), IHC (Immunohistochemistry)
Immunogen	E Coli-derived human ALDH1A3 recombinant protein (Position: N37-K154). Human ALDH1A3 shares 89% and 87.3% amino acid (aa) sequence identity with mouse and rat ALDH1A3, respectively.
Subcellular Localization	Cytoplasm.
Tissue Specificity	Expressed at low levels in many tissues and at higher levels in salivary gland, stomach, and kidney.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



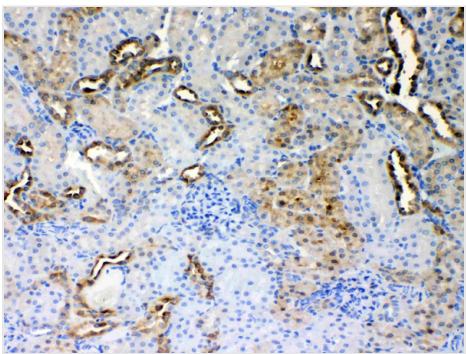
IHC (Immunohistochemistry)

Figure 4. IHC analysis of ALDH1A3 using anti- ALDH1A3 antibody (AAA124702).ALDH1A3 was detected in paraffin-embedded section of human gastric cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti- ALDH1A3 Antibody (AAA124702) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



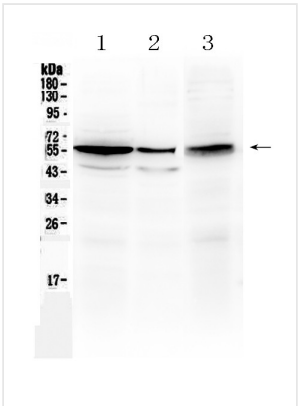
IHC (Immunohistochemistry)

Figure 2. IHC analysis of ALDH1A3 using anti- ALDH1A3 antibody (AAA124702).ALDH1A3 was detected in paraffin-embedded section of mouse kidney tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti- ALDH1A3 Antibody (AAA124702) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 3. IHC analysis of ALDH1A3 using anti- ALDH1A3 antibody (AAA124702).ALDH1A3 was detected in paraffin-embedded section of rat kidney tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti- ALDH1A3 Antibody (AAA124702) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of ALDH1A3 using anti- ALDH1A3 antibody (AAA124702).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: rat kidney tissue lysates,Lane 2: mouse gaster tissue lysates,Lane 3: HEPG2 whole Cell lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-ALDH1A3 antigen affinity purified polyclonal antibody at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for ALDH1A3 at approximately 56KD. The expected band size for ALDH1A3 is at 56KD.

ADDITIONAL INFORMATION

Related Product Information for anti-ALDH1A3 antibody

Description: Aldehyde dehydrogenase 1 family, member A3, also known as ALDH1A3 or retinaldehyde dehydrogenase 3 (RALDH3), is an enzyme that in humans is encoded by the ALDH1A3 gene. Aldehyde dehydrogenase isozymes are thought to play a major role in the detoxification of aldehydes generated by alcohol metabolism and lipid peroxidation. The enzyme encoded by this gene uses retinal as a substrate, either in a free or a cellular retinol-binding protein form. Mutations in this gene have been associated with microphthalmia, isolated 8, and expression changes have also been detected in tumor cells. Alternative splicing results in multiple transcript variants.

Protein Function: Recognizes as substrates free retinal and cellular retinol-binding protein-bound retinal. Seems to be the key enzyme in the formation of an RA gradient along the dorso-ventral axis during the early eye development and also in the development of the olfactory system (By similarity).

Product Categories/Family for anti-ALDH1A3 antibody	Neuroscience; Sensory System; Visual System; Neuroscience; olfactory system; Signal Transduction; Metabolism; Vitamins/Minerals; Alcohol Metabolism; Metabolism; Pathways and Processes; Metabolic Signaling Pathways; Cofactors; vitamins/minerals
---	---

NCBI AND UNIPROT INFORMATION

NCBI GI #	153266822
NCBI GeneID	220
NCBI Accession #	NP_000684.2
NCBI GenBank Nucleotide #	NM_000693.3
UniProt Accession #	P47895; Q6NT64
Molecular Weight	56108 MW
NCBI Official Full Name	aldehyde dehydrogenase family 1 member A3 isoform 1
NCBI Official Synonym Full Names	aldehyde dehydrogenase 1 family member A3
NCBI Official Symbol	ALDH1A3
NCBI Official Synonym Symbols	ALDH6; MCOP8; RALDH3; ALDH1A6
NCBI Protein Information	aldehyde dehydrogenase family 1 member A3
UniProt Protein Name	Aldehyde dehydrogenase family 1 member A3
UniProt Gene Name	ALDH1A3
UniProt Synonym Gene Names	; RALDH-3; RaIDH3

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/aldh1a3-antibody-western-blot-immunohistochemistry-elisa/124702>