

Datasheet for ABIN5518802  
**anti-ALDH1A3 antibody (AA 37-154)**[Go to Product page](#)

## 4 Images

## Overview

Quantity:	100 µg
Target:	ALDH1A3
Binding Specificity:	AA 37-154
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

## Product Details

Purpose:	Rabbit IgG polyclonal antibody for Aldehyde dehydrogenase family 1 member A3(ALDH1A3) detection. Tested with WB, IHC-P in Human,Mouse,Rat.
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.
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	<p>Rabbit IgG polyclonal antibody for Aldehyde dehydrogenase family 1 member A3(ALDH1A3) detection. Tested with WB, IHC-P in Human,Mouse,Rat.</p> <p>Gene Name: aldehyde dehydrogenase 1 family member A3</p> <p>Protein Name: Aldehyde dehydrogenase family 1 member A3</p>
Purification:	Immunogen affinity purified.

## Target Details

Target:	ALDH1A3
Alternative Name:	ALDH1A3 ( <a href="#">ALDH1A3 Products</a> )
Background:	<p>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.</p> <p>Synonyms: Aldh1a3   ALDH1A6   ALDH6   RALDH 3   V1   P47895</p>
Gene ID:	220
UniProt:	<a href="#">P47895</a>
Pathways:	<a href="#">Retinoic Acid Receptor Signaling Pathway</a>

## Application Details

Application Notes:	<p>WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human, Mouse, Rat</p> <p>IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Mouse, Rat, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections.</p> <p>Notes: Tested Species: Species with positive results. Other applications have not been tested. Optimal dilutions should be determined by end users.</p>
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).
Restrictions:	For Research Use only

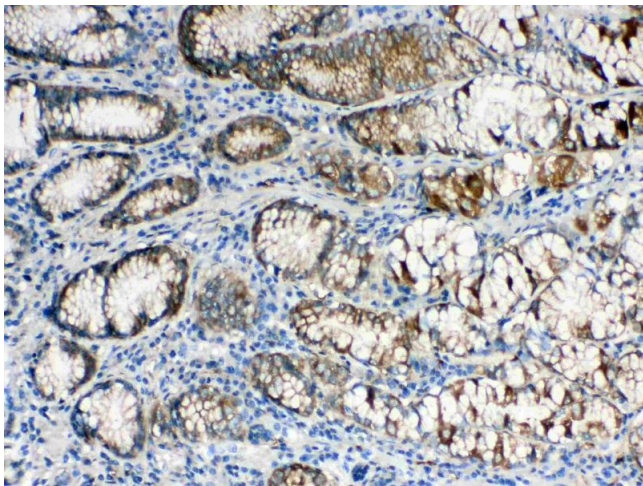
## Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL

## Handling

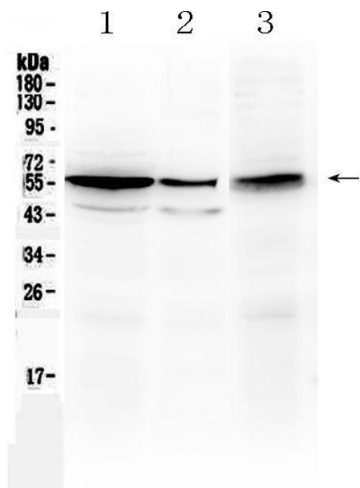
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C, -20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

## Images



### Immunohistochemistry

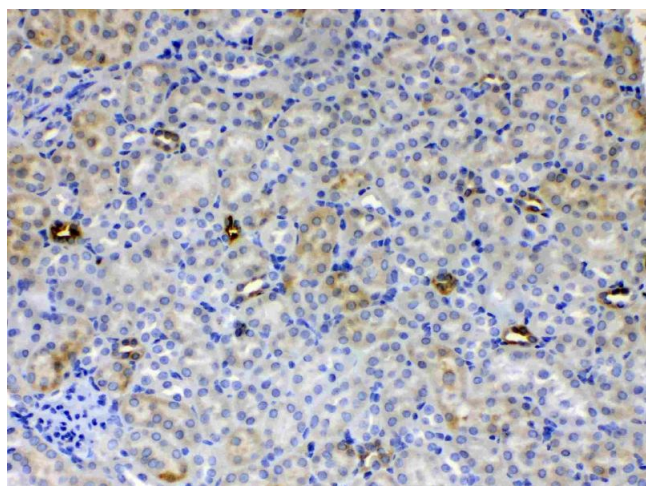
**Image 1.** IHC analysis of ALDH1A3 using anti- ALDH1A3 antibody . ALDH1A3 was detected in paraffin-embedded section of human gastric cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti- ALDH1A3 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



### Western Blotting

**Image 2.** Western blot analysis of ALDH1A3 using anti-ALDH1A3 antibody . 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 (Catalog # ) at 0.5 µg/mL overnight at 4°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 (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for ALDH1A3 at approximately 56KD. The expected band size for ALDH1A3 is at 56KD.



### Immunohistochemistry

**Image 3.** IHC analysis of ALDH1A3 using anti- ALDH1A3 antibody . 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 1µg/ml rabbit anti- ALDH1A3 Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN5518802.