Datasheet for ABIN4886427

anti-ADH1A antibody (AA 213-375)

2 Images

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Overview

Quantity:	100 µg
Target:	ADH1A
Binding Specificity:	AA 213-375
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 Alcohol dehydrogenase 1A(ADH1A) detection. Tested with WB, IHC-P in Human,Mouse,Rat.
Immunogen:	E. coli-derived human ADH1A recombinant protein (Position: K213-F375). Human ADH1A shares 87.1% and 82.8% amino acid (aa) sequence identity with mouse and rat ADH1A, respectively.
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for Alcohol dehydrogenase 1A(ADH1A) detection. Tested with WB, IHC-P in Human,Mouse,Rat. Gene Name: alcohol dehydrogenase 1A (class I), alpha polypeptide Protein Name: Alcohol dehydrogenase 1A
Purification:	Immunogen affinity purified.

Target Details

Target:	ADH1A
Alternative Name:	ADH1A (ADH1A Products)
Background:	Alcohol dehydrogenase 1A is an enzyme that in humans is encoded by the ADH1A gene. This gene encodes a member of the alcohol dehydrogenase family. The encoded protein is the alpha subunit of class I alcohol dehydrogenase, which consists of several homo- and heterodimers of alpha, beta and gamma subunits. Alcohol dehydrogenases catalyze the oxidation of alcohols to aldehydes. This gene is active in the liver in early fetal life but only weakly active in adult liver. And this gene is found in a cluster with six additional alcohol dehydrogenase genes, including those encoding the beta and gamma subunits, on the long arm of chromosome 4. Mutations in this gene may contribute to variation in certain personality traits and substance dependence. Synonyms: ADH | ADH1 | ADH1A | Alcohol dehydrogenase 1 | Alcohol dehydrogenase 1A | Aldehyde reductase | P07327
Gene ID:	124
UniProt:	P07327

Application Details

Application Notes:	WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human, Mouse, Rat IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, 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. Notes: Tested Species: Species with positive results. Other applications have not been tested. Optimal dilutions should be determined by end users.
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).
Restrictions:	For Research Use only

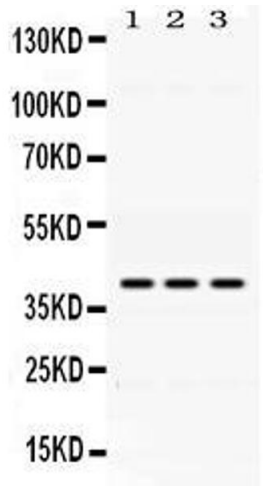
Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.

Handling

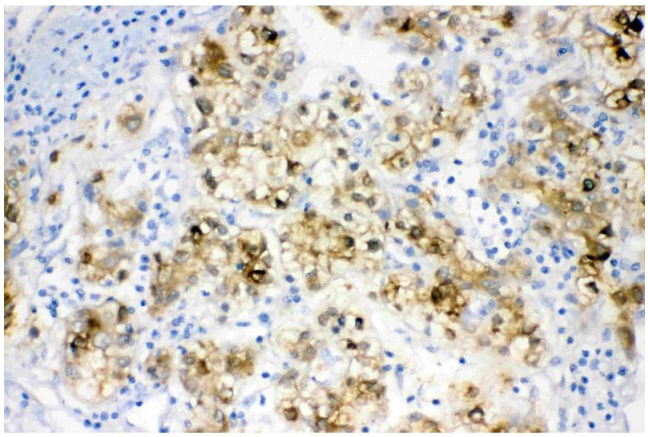
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, 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



Western Blotting

Image 1. Western blot analysis of ADH1A using anti- ADH1A 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 lung tissue lysates, Lane 2: mouse liver 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- ADH1A 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 ADH1A at approximately 40KD. The expected band size for ADH1A is at 40KD.



Immunohistochemistry

Image 2. IHC analysis of ADH1A using anti- ADH1A antibody . ADH1A was detected in paraffin-embedded section of human liver 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- ADH1A 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 Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.