

## **International Office**

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# EB05049 - Goat Anti-ALDH1A1 (C Terminus) Antibody

Size: 100µg specific antibody in 200µl



## **Target Protein**

**Principal Names:** ALDH1A1, aldehyde dehydrogenase 1 family, member A1, ALDC, ALDH-E1, ALDH1, ALDH11, MGC2318,, PUMB1, RALDH1, ALDH class 1, acetaldehyde dehydrogenase 1, aldehyde dehydrogenase 1, soluble, aldehyde dehydrogenase 1A1, aldehyde dehydrogenase, liver cytosolic, retinal dehydrogenase 1, retinaldehyde

dehydrogenase 1

Official Symbol: ALDH1A1

Accession Number(s): NP\_000680.2

Human GeneID(s): 216

Non-Human GenelD(s): 11668 (mouse), 24188 (rat)

**Important Comments:** This antibody may cross-react with ALDH1A2 (GeneID 8854) with one residue difference from this design and with ALDH2 (GeneID 217) with two residues

difference from this design.

#### **Immunogen**

Peptide with sequence C-EVKTVTVKISQKNS, from the C Terminus of the protein sequence according to NP\_000680.2.

Please note the peptide is available for sale.

## **Purification and Storage**

Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin.

Aliquot and store at -20°C. Minimize freezing and thawing.

#### **Applications Tested**

Peptide ELISA: antibody detection limit dilution 1:1000.

**Western blot:** Approx 55kDa band observed in Human, Mouse and Rat Liver lysates (calculated MW of 54.9kDa according to NP\_000680.2). Recommended concentration: 0.1-0.3µg/ml. Primary incubation was 1 hour.

**Immunofluorescence:** Strong expression of the protein seen in the cytoplasm of HepG2 cells. Recommended concentration: 10μg/ml. This antibody has been successfully used in IF on Human, PMID: 32157826.

#### **Species Reactivity**

Tested: Human, Mouse, Rat

Expected from sequence similarity: Human, Mouse, Rat

### **Specific References**

#### This antibody has been successfully used in IF on Human:

Jessy Etienne, Pierre Joanne, Cyril Catelain, Stéphanie Riveron, Alexandra Clarissa Bayer, Jérémy Lafable, Isabel Punzon, Stéphane Blot, Onnik Agbulut, and Jean∎Thomas Vilquin

Aldehyde dehydrogenases contribute to skeletal muscle homeostasis in healthy, aging, and Duchenne muscular dystrophy patients.

J Cachexia Sarcopenia Muscle. 2020 Aug; 11(4): 1047-1069.

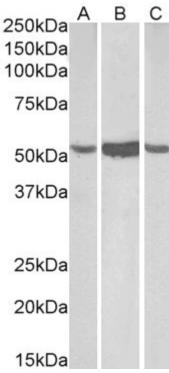
PMID: 32157826

## This antibody (previous batch) has been successfully used in WB and ICC on Human:

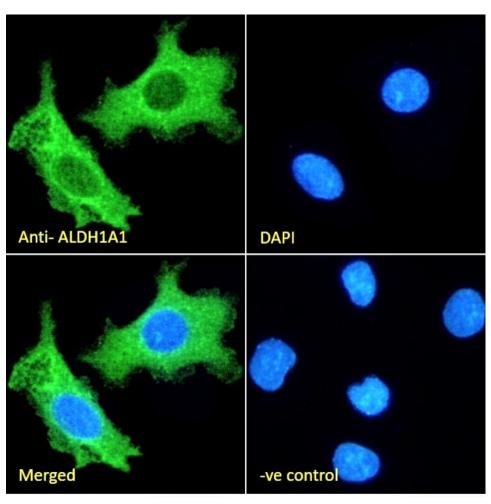
Amann PM, Hofmann C, Freudenberger M, Holland-Cunz S, Eichmüller SB, Bazhin AV. Expression and activity of alcohol and aldehyde dehydrogenases in melanoma cells and in melanocytes.

J Cell Biochem. 2012 Mar;113(3):792-9.

PMID: 22020955



EB05049 (0.1 $\mu$ g/ml) staining of Human (A), Mouse (B) and Rat (C) Liver lysate (35 $\mu$ g protein in RIPA buffer). Detected by chemiluminescence.



EB05049 Immunofluorescence analysis of paraformaldehyde fixed HepG2 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing

cytoplasmic staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml).