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Research Use Only. Not for diagnostic or therapeutic use.

EB05049-T - Goat Anti-ALDH1A1 (C Terminus) Antibody - Trial

Size: 20µg specific antibody in 40µl



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 GenelD(s): <u>216</u> Non-Human GenelD(s): 11668 (mouse), 24188 (rat) Important Comments: This antibody may cross-react with ALDH1A2 (GenelD 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: $10\mu g/ml$. 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

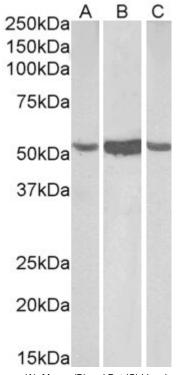
Aldehyde dehydrogenases contribute to skeletal muscle homeostasis in healthy, aging, and Duchenne muscular dystrophy patients.

J Cachexia Sarcopenia Muscle. 2020 Aug; 11(4): 1047-1069. PMID: 32157826

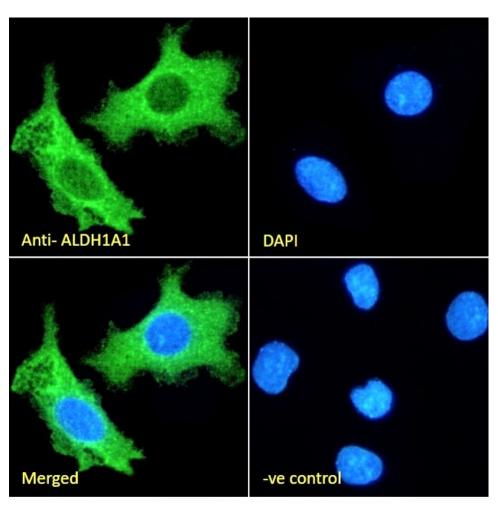
This antibody (previous batch) has been successfully used in WB and ICC on Human:

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 (0.1µg/ml) staining of Human (A), Mouse (B) and Rat (C) Liver lysate (35µg 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).