

MDH1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2908b

Specification

MDH1 Antibody (C-term) - Product Information

Application WB, IHC-P, FC,E

Primary Accession P40925

Other Accession <u>088989</u>, <u>P11708</u>, <u>P14152</u>, <u>Q5ZME2</u>, <u>Q3T145</u>

Reactivity Human

Predicted Bovine, Chicken, Mouse, Pig, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 36426
Antigen Region 286-314

MDH1 Antibody (C-term) - Additional Information

Gene ID 4190

Other Names

Malate dehydrogenase, cytoplasmic, Cytosolic malate dehydrogenase, Diiodophenylpyruvate reductase, MDH1, MDHA

Target/Specificity

This MDH1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 286-314 amino acids from the C-terminal region of human MDH1.

Dilution

WB~~1:1000 IHC-P~~1:10~50 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

MDH1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

MDH1 Antibody (C-term) - Protein Information





Name MDH1 {ECO:0000303|PubMed:34012073, ECO:0000312|HGNC:HGNC:6970}

Function Catalyzes the reduction of aromatic alpha-keto acids in the presence of NADH (PubMed:2449162, PubMed:3052244). Plays essential roles in the malate-aspartate shuttle and the tricarboxylic acid cycle, important in mitochondrial NADH supply for oxidative phosphorylation (PubMed:31538237). Catalyzes the reduction of 2-oxoglutarate to 2- hydroxyglutarate, leading to elevated reactive oxygen species (ROS) (PubMed:34012073).

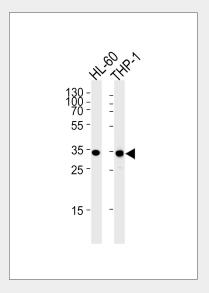
Cellular Location Cytoplasm, cytosol.

MDH1 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

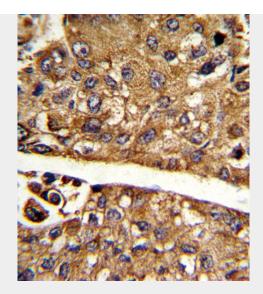
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MDH1 Antibody (C-term) - Images

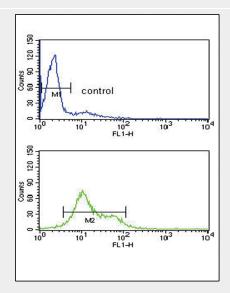


MDH1 Antibody (C-term) (Cat. #AP2908b) western blot analysis in HL-60,THP-1 cell line lysates (35ug/lane). This demonstrates the MDH1 antibody detected the MDH1 protein (arrow).





Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with MDH1 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



MDH1 Antibody (C-term) (Cat. #AP2908b) flow cytometry analysis of HL-60 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

MDH1 Antibody (C-term) - Background

MDH1 is localized to the cytoplasm and may play pivotal roles in the malate-aspartate shuttle that operates in the metabolic coordination between cytosol and mitochondria.

MDH1 Antibody (C-term) - References

Lee, S.M., et.al., Cell Death Differ. 16 (5), 738-748 (2009)