

MDH1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP2908b

Product Information

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| Application | IHC-P, FC, WB, E |
| Primary Accession | P40925 |
| Other Accession | O88989 , P11708 , P14152 , Q5ZME2 , Q3T145 |
| Reactivity | Human, Rat, Mouse |
| Predicted | Bovine, Chicken, Mouse, Pig, Rat |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | Rabbit IgG |
| Calculated MW | 36426 |
| Antigen Region | 286-314 |

Additional Information

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|---------------------------|---|
| 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 | IHC-P~~1:100~500 FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration. |
| 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. |

Protein Information

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|-----------------|---|
| 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.

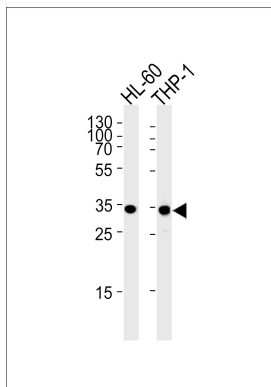
Background

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.

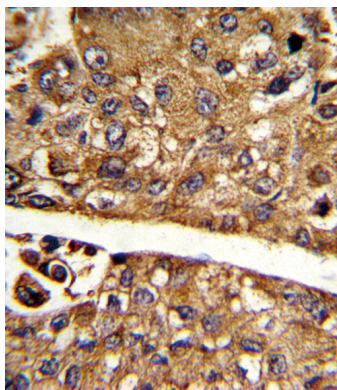
References

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

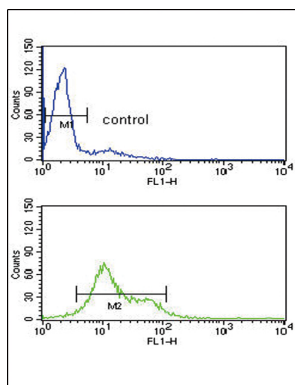
Images



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.