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MDH1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AW5245

Specification

MDH1 Antibody (C-term) - Product Information

Application	**FC, IHC-P, WB,E**
Primary Accession	P40925
Other Accession	O88989, P11708, P14152, Q5ZME2, Q3T145
Reactivity	**Human**
Predicted	**Bovine, Chicken, Mouse, Pig, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**H=36,27,39;M=37;Rat=36 KDa**
Isotype	**Rabbit IgG**
Antigen Source	**HUMAN**

MDH1 Antibody (C-term) - Additional Information

Gene ID 4190

Antigen Region
286-314

Other Names
MDH1; MDHA; Malate dehydrogenase, cytoplasmic; Cytosolic malate dehydrogenase; Diiodophenylpyruvate reductase

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

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.

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.

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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).

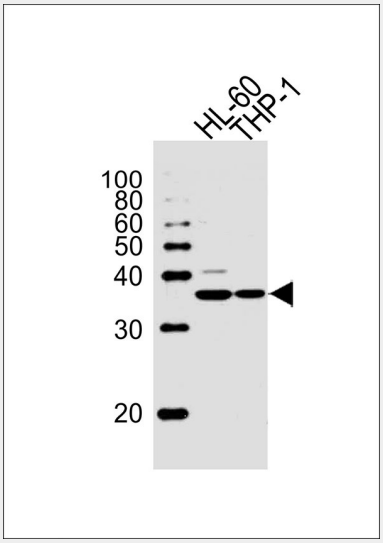
Cellular Location
Cytoplasm, cytosol.

MDH1 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MDH1 Antibody (C-term) - Images



Western blot analysis of lysates from HL-60,THP-1 cell line (from left to right), using MDH1 Antibody (C-term)(Cat. #AW5245). AW5245 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.

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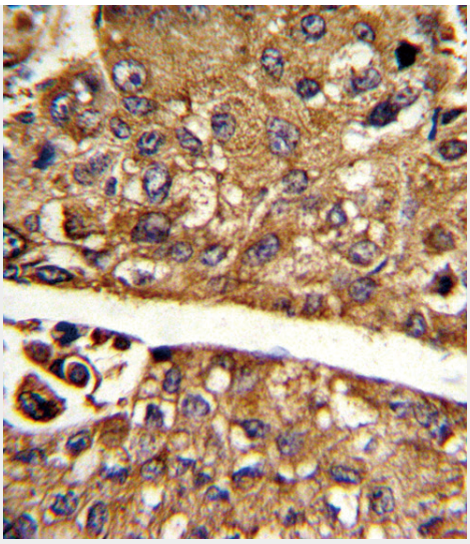
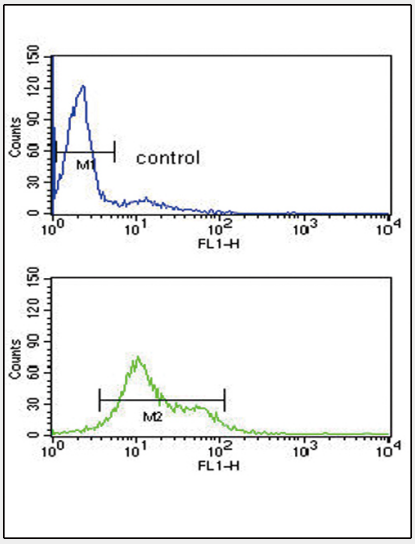


Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with MDH1 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



MDH1 Antibody (C-term) (Cat. #AW5245) 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)