

**MDH1 Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AW5245****Specification**

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**MDH1 Antibody (C-term) - Product Information**

Application	FC, IHC-P, WB,E
Primary Accession	<a href="#">P40925</a>
Other Accession	<a href="#">O88989</a> , <a href="#">P11708</a> , <a href="#">P14152</a> , <a href="#">O5ZME2</a> , <a href="#">O3T145</a>
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.

## 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:<a href="http://www.uniprot.org/citations/2449162" target="\_blank">2449162</a>, PubMed:<a href="http://www.uniprot.org/citations/3052244" target="\_blank">3052244</a>). Plays essential roles in the malate-aspartate shuttle and the tricarboxylic acid cycle, important in mitochondrial NADH supply for oxidative phosphorylation (PubMed:<a href="http://www.uniprot.org/citations/31538237" target="\_blank">31538237</a>). Catalyzes the reduction of 2-oxoglutarate to 2- hydroxyglutarate, leading to elevated reactive oxygen species (ROS) (PubMed:<a href="http://www.uniprot.org/citations/34012073" target="\_blank">34012073</a>).

### Cellular Location

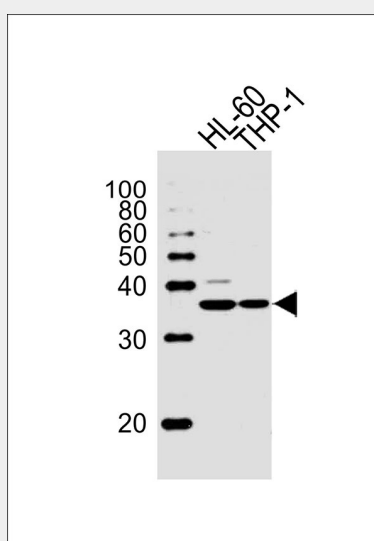
Cytoplasm, cytosol.

## MDH1 Antibody (C-term) - Protocols

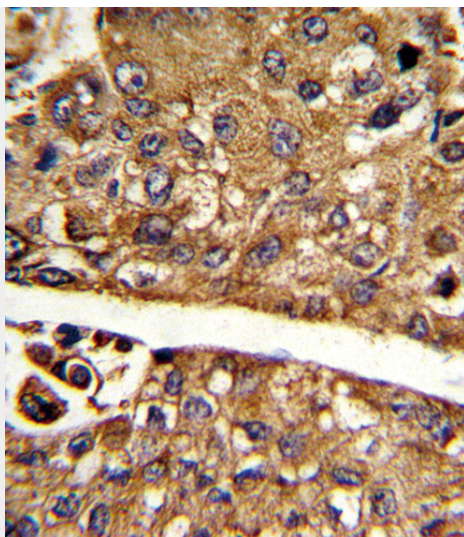
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

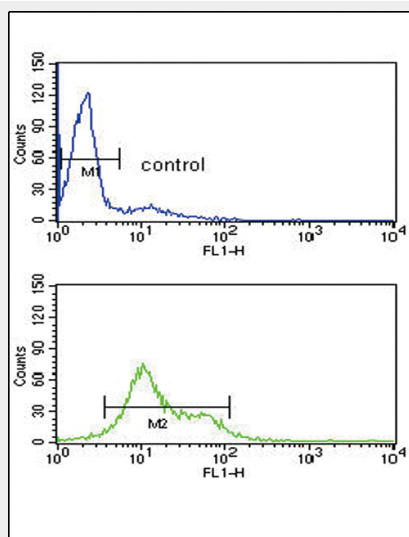
## MDH1 Antibody (C-term) - Images



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.



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)