

For Research Use Only

# MDH1 Polyclonal antibody

Catalog Number: 15904-1-AP

Featured Product

21 Publications



## Basic Information

**Catalog Number:**

15904-1-AP

**Size:**

173 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG8744

**GenBank Accession Number:**

BC001484

**GeneID (NCBI):**

4190

**UNIPROT ID:**

P40925

**Full Name:**

malate dehydrogenase 1, NAD (soluble)

**Calculated MW:**

334 aa, 36 kDa

**Observed MW:**

36 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:5000-1:50000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF 1:10-1:100

## Applications

**Tested Applications:**

FC, IF/ICC, IHC, IP, WB, ELISA

**Cited Applications:**

WB, IP, IF, IHC

**Species Specificity:**

human, mouse, rat

**Cited Species:**

human, rat, mouse

**Positive Controls:**

**WB:** HepG2 cells, HL-60 cells, HEK-293 cells, mouse liver tissue, rat liver tissue

**IP:** HepG2 cells,

**IHC:** human renal cell carcinoma tissue, human liver cancer tissue, rat heart tissue, mouse kidney tissue

**IF:** HepG2 cells,

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

MDH1 (Malate dehydrogenase, cytoplasmic) is also named as MDHA and belongs to the LDH/MDH superfamily and MDH type 2 family which catalyzes the reversible oxidation of malate to oxaloacetate, utilizing the NAD/NADH cofactor system in the citric acid cycle. It can exist as a dimer and the dimeric MDH1 is the mitochondrial isoenzyme, whereas the tetrameric MDH2 is the glycosomal isoenzyme. (PMID:10693743)

## Notable Publications

Author	Pubmed ID	Journal	Application
Teresa W-M Fan	36150727	J Immunol	
Xiaoyu Ma	25301052	Nat Commun	WB
Jia-Yuan Zhang	34012073	Cell Res	WB

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

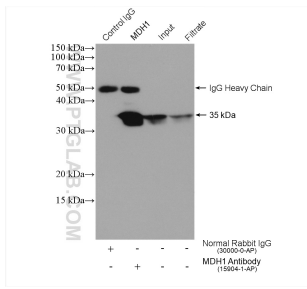
T: 4006900926

E: Proteintech-CN@ptglab.com

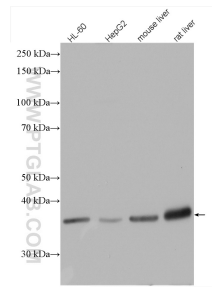
W: ptgcn.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

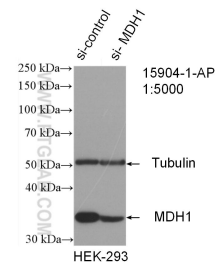
## Selected Validation Data



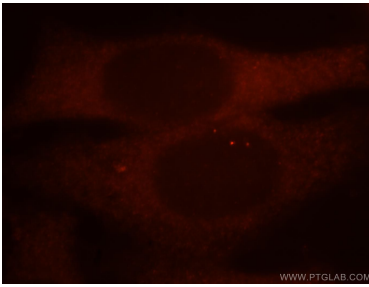
IP result of anti-MDH1 (IP:15904-1-AP, 4ug; Detection:15904-1-AP 1:10000) with HepG2 cells lysate 960 ug.



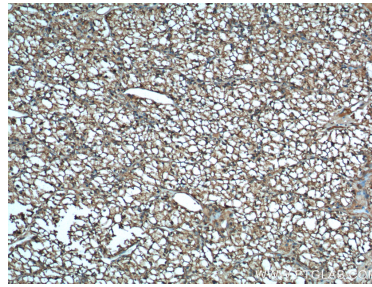
HepG2 cells were subjected to SDS PAGE followed by western blot with 15904-1-AP (MDH1 antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours.



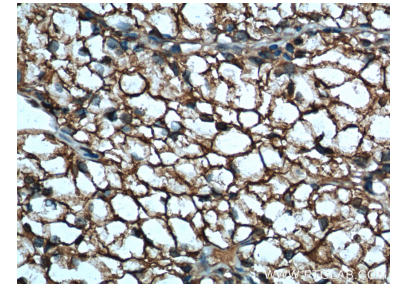
WB result of MDH1 antibody (15904-1-AP; 1:5000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MDH1 transfected HEK-293 cells.



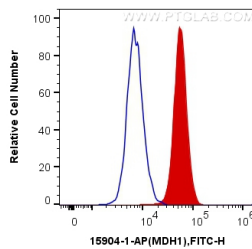
Immunofluorescent analysis of HepG2 cells, using MDH1 antibody 15904-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).



Immunohistochemical analysis of paraffin-embedded human renal cell carcinoma tissue slide using 15904-1-AP (MDH1 Antibody) at dilution of 1:100 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human renal cell carcinoma tissue slide using 15904-1-AP (MDH1 Antibody) at dilution of 1:100 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10<sup>6</sup> HepG2 cells were intracellularly stained with 0.4 ug Anti-Human MDH1 (15904-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug x. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).