## For Research Use Only

# MDH1 Polyclonal antibody

Catalog Number: 15904-1-AP

Featured Product

22 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 15904-1-AP BC001484

Size: GeneID (NCBI): 4190

Source: UNIPROT ID:

Rabbit P40925
Isotype: Full Name:

gG malate dehydrogenase 1, NAD
(soluble)

36 kDa

Immunogen Catalog Number: (soluble)
AG8744 Calculated MW:

334 aa, 36 kDa Observed MW:

**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

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

buffer pH 6.0

**Purification Method:** 

Antigen affinity purification

Recommended Dilutions: WB 1:5000-1:50000

IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:50-1:500 IF 1:10-1:100

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,

## **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 exsit 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

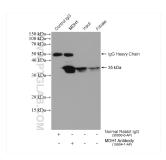
For technical support and original validation data for this product please contact:

T: 4006900926 E: Proteintech-CN@ptglab.com

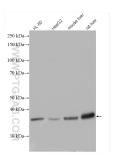
W: ptgcn.cor

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

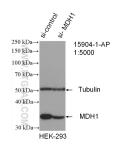
### Selected Validation Data



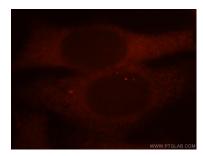
IP result of anti-MDH1 (IP:15904-1-AP, 4ug; Detection:15904-1-AP 1:10000) with HepG2 cells lysate 960 ug.



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.



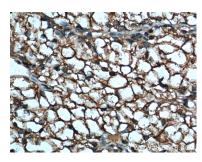
WB result of MDH1 antibody (15904-1-AP; 1:5000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MDH1 transfected HEK-293 cells.



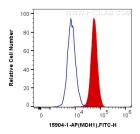
Immunofluorescent analysis of HepG2 cells, using MDH1 antibody 15904-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).



Immunohistochemical analysis of paraffinembedded 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 paraffinembedded 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).



1X10^6 HepG2 cells were intracellularly stained with 0.4 ug Anti-Human MDH1 (15904-1-AP) and Coralite® 488-Conjugated AffiniPure Goat Anti-Rabbit  $\lg G(H+l)$  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).