

For Research Use Only

# MDH1 Monoclonal antibody

Catalog Number: 66505-1-Ig

Featured Product

2 Publications



## Basic Information

Catalog Number:

66505-1-Ig

Size:

1300 ug/ml

Source:

Mouse

Isotype:

IgG1

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:

36-37 kDa

Purification Method:

Protein G purification

CloneNo.:

1F9A2

Recommended Dilutions:

WB 1:2000-1:10000

IHC 1:1000-1:4000

IF/ICC 1:50-1:500

## Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

Cited Applications:

WB, IP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse

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

Positive Controls:

WB : HeLa cells, HEK-293 cells, NIH/3T3 cells, RAW 264.7 cells, Jurkat cells

IHC : rat heart tissue,

IF/ICC : 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 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
Yuan Chen	39178178	J Proteome Res	WB
Yukun Wang	38172700	Cell Mol Biol Lett	IP

## 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:

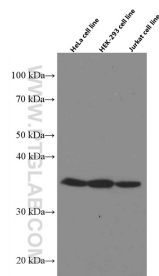
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

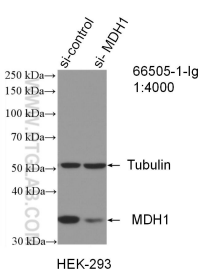
W: [ptgcn.com](http://ptgcn.com)

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

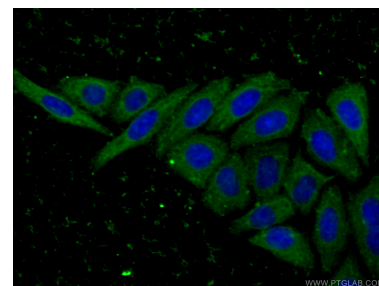
## Selected Validation Data



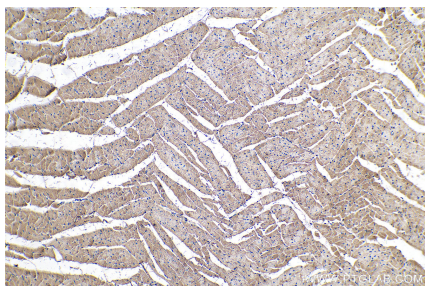
Various lysates were subjected to SDS PAGE followed by western blot with 66505-1-Ig (MDH1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



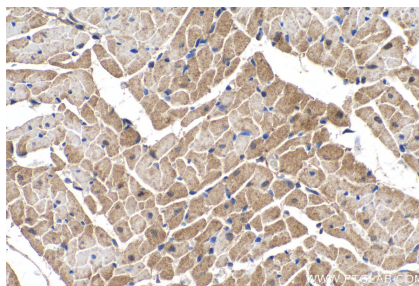
WB result of MDH1 antibody (66505-1-Ig; 1:4000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MDH1 transfected HEK-293 cells.



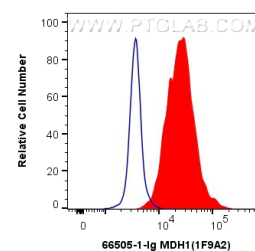
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using 66505-1-Ig (MDH1 antibody) at dilution of 1:100 and CoraLite488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunohistochemical analysis of paraffin-embedded rat heart tissue slide using 66505-1-Ig (MDH1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded rat heart tissue slide using 66505-1-Ig (MDH1 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10<sup>6</sup> HEK-293 cells were intracellularly stained with 0.4 ug Anti-Human MDH1 (66505-1-Ig, Clone:1F9A2) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG1 Isotype Control (MOPC-21) (65124-1-Ig, Clone: MOPC-21) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).