### For Research Use Only

# MDH1 Monoclonal antibody

Catalog Number:66505-1-lg Featured Product

2 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number:

66505-1-lg BC001484 GeneID (NCBI): Size: 150ul, Concentration: 1300 ug/ml by 4190

Nanodrop and 1000 ug/ml by Bradford<sub>UNIPROT ID:</sub> method using BSA as the standard; P40925 Source:

Full Name: Mouse malate dehydrogenase 1, NAD

Isotype: (soluble) lgG1 Calculated MW:

334 aa, 36 kDa Immunogen Catalog Number: AG8744 Observed MW: 36-37 kDa

**Tested Applications:** 

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

Cited Applications:

**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

**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** 

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**

 $MDH1 \, (Malate \, dehydrogenase, \, cytoplasmic) \, is \, also \, named \, as \, MDHA \, and \, belongs \, to \, the \, LDH/MDH \, superfamily \, and \, constant \, also \, constant \, also$ 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
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.

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

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

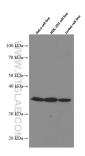
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

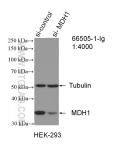
E: proteintech@ptglab.com W: ptglab.com

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

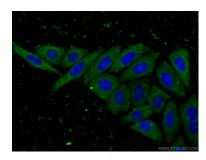
### Selected Validation Data



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.



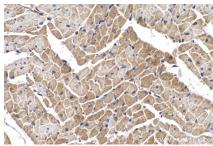
WB result of MDH1 antibody (66505-1-lg; 1:4000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MDH1 transfected HEK-293 cells.



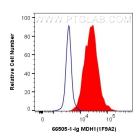
Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using 66505-1-1g (MDH1 antibody) at dilution of 1:100 and CoraLite488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



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



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



1X10^6 HEK-293 cells were intracellularly stained with 0.4 ug Anti-Human MDH1 (66505-1-1g, 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) (65124-1-1g, Clone: MOPC-21) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).