

For Research Use Only

# MPI Monoclonal antibody

Catalog Number: 68417-1-Ig **Featured Product**



## Basic Information

**Catalog Number:**

68417-1-Ig

**Size:**

150ul, Concentration: 1000 ug/ml by Nanodrop;

**Source:**

Mouse

**Isotype:**

IgG1

**Immunogen Catalog Number:**

AG5475

**GenBank Accession Number:**

BC046357

**GeneID (NCBI):**

4351

**UNIPROT ID:**

P34949

**Full Name:**

mannose phosphate isomerase

**Calculated MW:**

47 kDa

**Observed MW:**

40-47 kDa

**Purification Method:**

Protein G purification

**CloneNo.:**

3B10A6

**Recommended Dilutions:**

WB 1:5000-1:50000

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

IHC 1:250-1:1000

IF/ICC 1:500-1:2000

## Applications

**Tested Applications:**

WB, IHC, IF/ICC, IP, ELISA

**Species Specificity:**

human, mouse, rat, pig

**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 : MCF-7 cells, HEK-293 cells, rat brain tissue, A549 cells, LnCaP cells, Jurkat cells, K-562 cells, pig brain tissue

IP : Jurkat cells,

IHC : mouse brain tissue,

IF/ICC : NIH/3T3 cells,

## Background Information

MPI (mannose-6-phosphate isomerase) is also named as PMI1 and belongs to the mannose-6-phosphate isomerase type 1 family. It is a zinc metalloenzyme that catalyzes the reversible isomerization of mannose-6-phosphate and fructose-6-phosphate. MPI plays a critical role in maintaining the supply of D-mannose derivatives, which are required for most glycosylation reactions. This protein has 2 isoforms produced by alternative splicing.

## 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

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

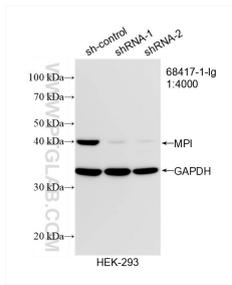
For technical support and original validation data for this product please contact:

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

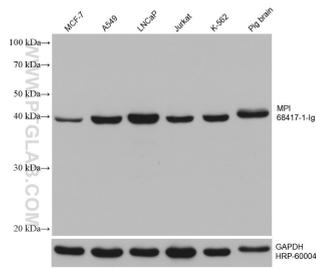
E: proteintech@ptglab.com  
W: ptglab.com

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

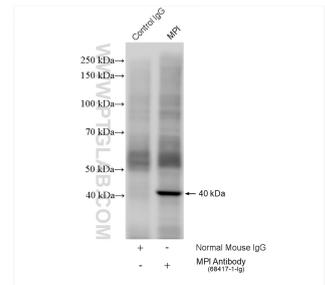
## Selected Validation Data



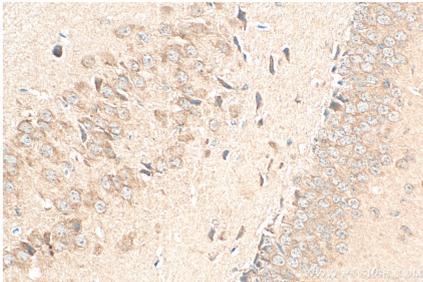
WB result of MPI antibody (68417-1-Ig; 1:4000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MPI transfected HEK-293 cells.



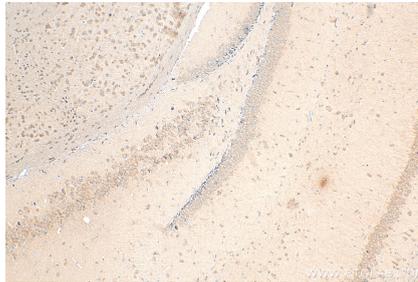
Various lysates were subjected to SDS PAGE followed by western blot with 68417-1-Ig (MPI antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



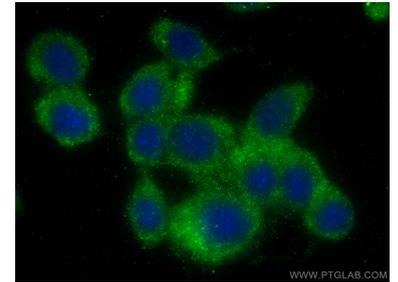
IP result of anti-MPI (IP:68417-1-Ig, 4ug; Detection:68417-1-Ig 1:2000) with Jurkat cells lysate 2280 ug.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 68417-1-Ig (MPI antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 68417-1-Ig (MPI antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed NIH/3T3 cells using MPI antibody (68417-1-Ig, Clone: 3B10A6) at dilution of 1:1000 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).