

For Research Use Only

# MEF2C Polyclonal antibody

Catalog Number: 10056-1-AP

Featured Product

50 Publications



## Basic Information

### Catalog Number:

10056-1-AP

### Concentration:

1000 µg/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG0020

### GenBank Accession Number:

BC156603

### GeneID (NCBI):

4208

### UNIPROT ID:

Q06413

### Full Name:

myocyte enhancer factor 2C

### Calculated MW:

51 kDa

### Observed MW:

45-70 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:500-1:1000

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

IHC: 1:20-1:200

IF/ICC: 1:50-1:500

FC (Intra): 0.40 µg per 10<sup>6</sup> cells in a 100 µl suspension

## Applications

### Tested Applications:

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

### Cited Applications:

WB, IHC, IF, IP, ChIP

### Species Specificity:

human, mouse

### Cited Species:

human, mouse, rat, pig, bovine, goat

**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: SH-SY5Y cells, mouse colon tissue, mouse brain tissue, mouse heart tissue

IP: SH-SY5Y cells,

IHC: human lymphoma tissue,

IF/ICC: HepG2 cells,

FC (Intra): HeLa cells,

## Background Information

MEF2C belongs to the MEF2 family. It is a transcription activator which binds specifically to the MEF2 element present in the regulatory regions of many muscle-specific genes. MEF2C controls cardiac morphogenesis and myogenesis, and is also involved in vascular development [PMID: 20221419]. It plays an essential role in hippocampal-dependent learning and memory by suppressing the number of excitatory synapses and thus regulating basal and evoked synaptic transmission [PMID: 18599438]. It is crucial for normal neuronal development, distribution, and electrical activity in the neocortex and is necessary for proper development of megakaryocytes and platelets and for bone marrow B lymphopoiesis [PMID: 21666133]. This protein is required for B-cell survival and proliferation in response to BCR stimulation, efficient IgG1 antibody responses to T-cell-dependent antigens and for normal induction of germinal center B cells. It may also be involved in neurogenesis and in the development of cortical architecture. MEF2C exists some isoforms with MV 50-52 kDa, 47 kDa, and 45 kDa, but modified MEF2C is about 55-66 kDa.

## Notable Publications

Author	Pubmed ID	Journal	Application
Adrian Fischer	27901111	Sci Rep	WB
Jae-Yeol Joo	26595656	Nat Neurosci	WB
Shichun Tu	29133852	Nat Commun	WB

## Storage

### Storage:

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

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

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)

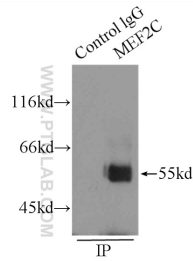
W: [ptgcn.com](http://ptgcn.com)

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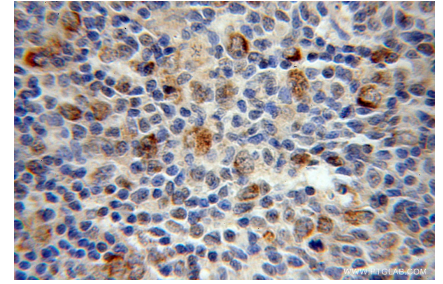
## Selected Validation Data



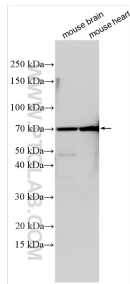
SH-SY5Y cells were subjected to SDS PAGE followed by western blot with 10056-1-AP (MEF2C antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



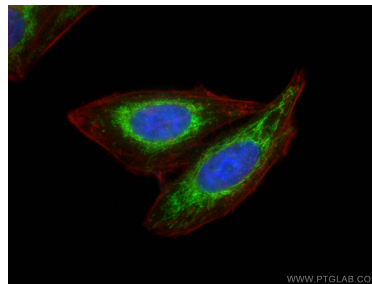
IP result of anti-MEF2C (IP:10056-1-AP, 3ug; Detection:10056-1-AP 1:500) with SH-SY5Y cells lysate 2000ug.



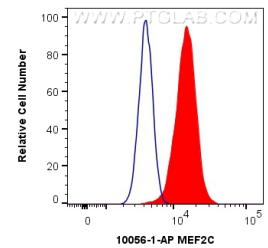
Immunohistochemical analysis of paraffin-embedded human lymphoma using 10056-1-AP (MEF2C antibody) at dilution of 1:50 (under 40x lens).



Various lysates were subjected to SDS PAGE followed by western blot with 10056-1-AP (MEF2C antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using MEF2C antibody (10056-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human MEF2C (10056-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).