

For Research Use Only

# MEF2C Polyclonal antibody

Catalog Number: 10056-1-AP

Featured Product

40 Publications



## Basic Information

<b>Catalog Number:</b> 10056-1-AP	<b>GenBank Accession Number:</b> BC156603	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul, Concentration: 1000 µg/ml by Nanodrop and 467 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 4208	<b>Recommended Dilutions:</b> 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 1:50-1:500
<b>Source:</b> Rabbit	<b>Full Name:</b> myocyte enhancer factor 2C	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 51 kDa	
<b>Immunogen Catalog Number:</b> AG0020	<b>Observed MW:</b> 45-70 kDa	

## Applications

<b>Tested Applications:</b> FC, IF, IHC, IP, WB, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> ChIP, IF, IHC, WB	<b>WB:</b> SH-SY5Y cells, mouse colon tissue, mouse brain tissue, mouse heart tissue
<b>Species Specificity:</b> human, mouse	<b>IP:</b> SH-SY5Y cells,
<b>Cited Species:</b> human, goat, rat, mouse, pig, bovine	<b>IHC:</b> human lymphoma tissue,
	<b>IF:</b> HepG2 cells,
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## 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

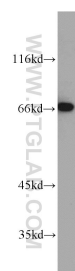
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

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

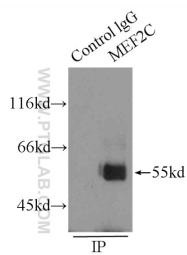
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

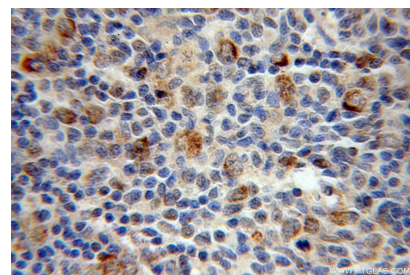
## Selected Validation Data



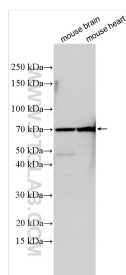
SH-SY5Y cells were subjected to SDS PAGE followed by western blot with 10056-1-AP (MEF2C antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



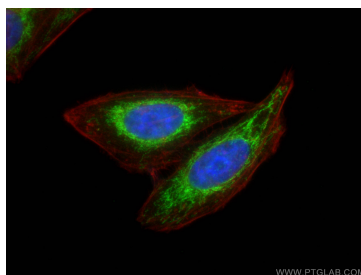
IP Result of anti-MEF2C (IP:10056-1-AP, 3ug; Detection:10056-1-AP 1:500) with SH-SY5Y cells lysate 2000ug.



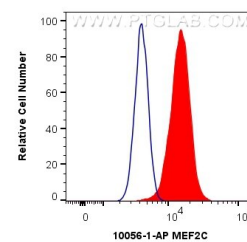
Immunohistochemical analysis of paraffin-embedded human lymphoma using 10056-1-AP (MEF2C antibody) at dilution of 1:50 (under 40x lens).



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 AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



$1 \times 10^6$  HeLa cells were intracellularly stained with 0.4 ug Anti-Human MEF2C (10056-1-AP) and Coralite@488-Conjugated AffiniPure 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).