For Research Use Only

MEF2C Polyclonal antibody

Catalog Number: 10056-1-AP

Featured Product

46 Publications



Basic Information

Catalog Number: 10056-1-AP

Size:

BC156603 GeneID (NCBI):

GenBank Accession Number:

1000 µg/ml 4208 **UNIPROT ID:** Source: Rabbit Q06413

Isotype: myocyte enhancer factor 2C

Calculated MW: Immunogen Catalog Number:

AG0020 51 kDa

> Observed MW: 45-70 kDa

Full Name:

Purification Method: Antigen affinity purification Recommended Dilutions:

WB 1:500-1:1000

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

protein lysate IHC 1:20-1:200 IF/ICC 1:50-1:500

Applications

Tested Applications:

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

Cited Applications WB, IHC, IF, 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:

IP: SH-SY5Y cells,

WB: SH-SY5Y cells, mouse colon tissue, mouse brain

tissue, mouse heart tissue

IHC: human lymphoma tissue,

IF/ICC: HepG2 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 $proliferation\ in\ response\ to\ BCR\ stimulation,\ efficient\ lgG1\ antibody\ responses\ to\ T-cell-dependent\ antigens\ and\ for\ responses\ to\ T-cell-dependent\ antigens\ antigens\ and\ for\ responses\ to\ T-cell-dependent\ antigens\ antige$ 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

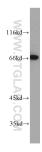
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

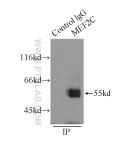
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

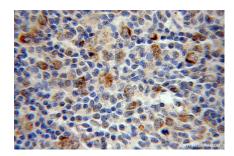
Selected Validation Data



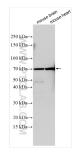
SH-SY5Y cells were subjected to SDS PAGE followed by western blot with 10056-1-AP (MEF2C antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



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



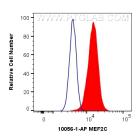
Immunohistochemical analysis of paraffinembedded human lymphoma using 10056-1-AP (MEF2C antibody) at dilution of 1:50 (under 40x lens).



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).



1X10^6 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).