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MEF2C Antibody (S387)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6285a

Product Information

Application	WB, IHC-P, IF, E
Primary Accession	Q06413
Other Accession	A4UTP7
Reactivity	Human, Mouse
Predicted	Pig, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	51221
Antigen Region	365-394

Additional Information

Gene ID	4208
Other Names	Myocyte-specific enhancer factor 2C, MEF2C
Target/Specificity	This MEF2C antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 365-394 amino acids from human MEF2C.
Dilution	WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MEF2C Antibody (S387) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MEF2C (HGNC:6996)
Function	Transcription activator which binds specifically to the MEF2 element present in the regulatory regions of many muscle-specific genes. Controls cardiac morphogenesis and myogenesis, and is also involved in vascular

development. Enhances transcriptional activation mediated by SOX18. 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. Crucial for normal neuronal development, distribution, and electrical activity in the neocortex. Necessary for proper development of megakaryocytes and platelets and for bone marrow B-lymphopoiesis. 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. May also be involved in neurogenesis and in the development of cortical architecture (By similarity). Isoforms that lack the repressor domain are more active than isoform 1.

Cellular Location Nucleus {ECO:0000250|UniProtKB:A0A096MJY4}. Cytoplasm, sarcoplasm {ECO:0000250|UniProtKB:A0A096MJY4}

Tissue Location Expressed in brain and skeletal muscle.

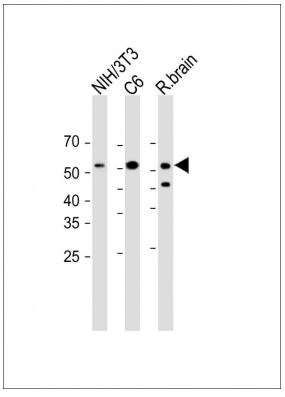
Background

MEF2C is a transcription activator which binds specifically to the MEF2 element present in the regulatory regions of many muscle-specific genes. This protein controls cardiac morphogenesis and myogenesis, and is also involved in vascular development. It may also be involved in neurogenesis and in the development of cortical architecture.

References

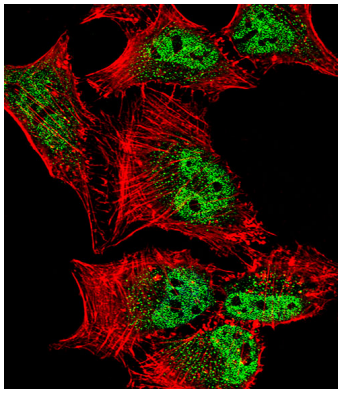
Konig, S., et al., J. Biol. Chem. 279(27):28187-28196 (2004). Maeda, T., et al., J. Biol. Chem. 277(50):48889-48898 (2002). Maeda, T., et al., Biochem. Biophys. Res. Commun. 294(4):791-797 (2002). Janson, C.G., et al., Brain Res. Mol. Brain Res. 97(1):70-82 (2001). Krainc, D., et al., Genomics 29(3):809-811 (1995).

Images

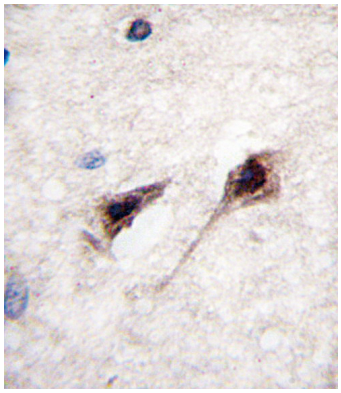


All lanes: Anti-MEF2C Antibody (S387) at 1:1000 dilution Lane 1: NIH/3T3 whole cell lysate Lane 2: C6 whole cell lysate Lane 3: Rat brain lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 52 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

Fluorescent confocal image of Hela cell stained with MEF2C Antibody (S387)(Cat#AP6285a).Hela cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with MEF2C primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C). Nuclei



were counterstained with DAPI (blue) (10 µg/ml, 10 min).MEF2C immunoreactivity is localized to vesicles and Nucleus significantly.



Formalin-fixed and paraffin-embedded human brain tissue reacted with MEF2C Antibody (S387) (Cat.#AP6285a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.