10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MEF2C Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1786a

Product Information

Application	WB, IHC, FC, E
Primary Accession	Q06413
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Clone Names	6H2G2
Isotype	IgG1
Calculated MW	51221
Description	This locus encodes a member of the MADS box transcription enhancer factor 2 (MEF2) family of proteins, which play a role in myogenesis. The encoded protein, MEF2 polypeptide C, has both trans-activating and DNA binding activities. This protein may play a role in maintaining the differentiated state of muscle cells. Mutations and deletions at this locus have been associated with severe mental retardation, stereotypic movements, epilepsy, and cerebral malformation. Alternatively spliced transcript variants have been described.
Immunogen	Purified recombinant fragment of human MEF2C (AA: 1-125) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	4208
Other Names	Myocyte-specific enhancer factor 2C, MEF2C
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MEF2C Antibody 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.

References

1.PLoS One. 2011;6(11):e27165. 2.J Biol Chem. 2011 Aug 26;286(34):30071-86.

Images

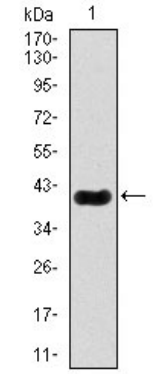


Figure 1: Western blot analysis using MEF2C mAb against human MEF2C recombinant protein. (Expected MW is 40 kDa)

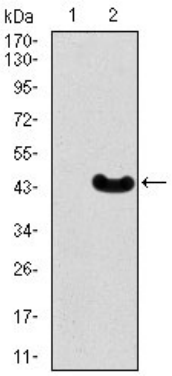
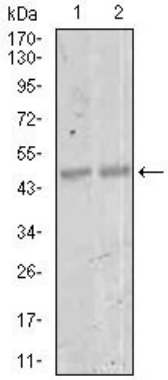


Figure 2: Western blot analysis using MEF2C mAb against HEK293 (1) and MEF2C (AA: 1-125)-hIgGFc transfected HEK293 (2) cell lysate.

Figure 3: Western blot analysis using MEF2C mouse mAb against NIH3T3 (1) and 3T3-L1 (2) cell lysate.



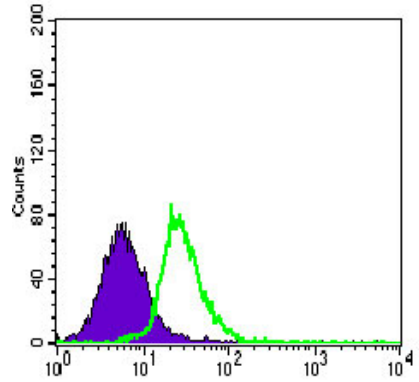


Figure 4: Flow cytometric analysis of HeLa cells using MEF2C mouse mAb (green) and negative control (purple).

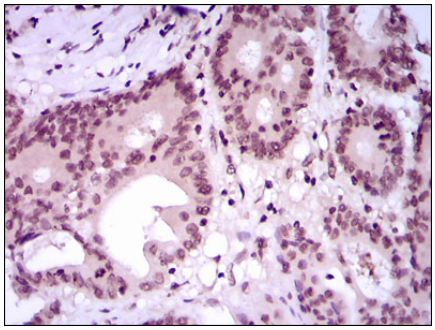


Figure 5: Immunohistochemical analysis of paraffin-embedded colon cancer tissues using MEF2C mouse mAb with DAB staining.

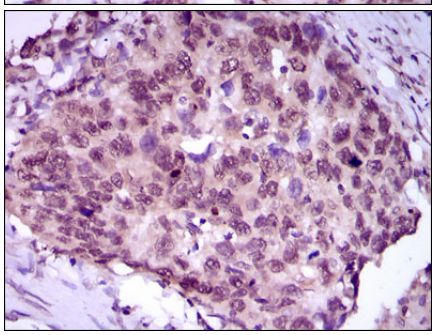


Figure 6: Immunohistochemical analysis of paraffin-embedded esophageal cancer tissues using MEF2C mouse mAb with DAB staining.

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