

Rabbit MEF2C Polyclonal Antibody | anti-MEF2C antibody

MEF2C Antibody

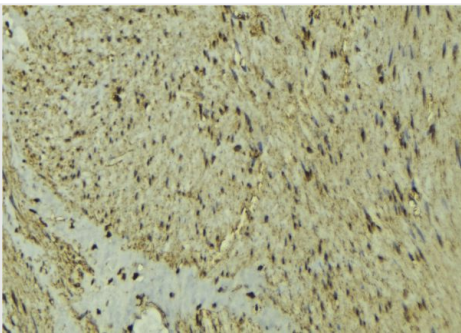
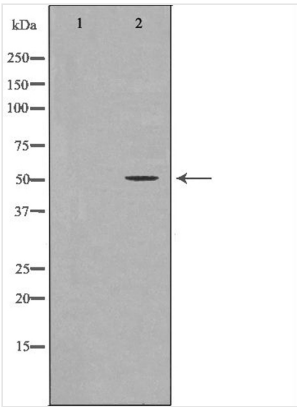
CATALOG # AAA326785	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS ELISA, Immunohistochemistry, Western Blot
-------------------------------	-----------------------	--	--

PRODUCT SYNONYMS

MEF2C; Polyclonal Antibody; MEF2C Antibody; C5DELq14.3; DEL5q14.3; MADS box transcription enhancer factor 2 polypeptide C (myocyte enhancer factor 2C); MADS box transcription enhancer factor 2; polypeptide C; MEF2C_HUMAN; Myocyte enhancer factor 2C; Myocyte specific enhancer factor 2C; Myocyte-specific enhancer factor 2C; OTTHUMP00000222409; Similar to MADS box transcription enhancer factor 2 polypeptide C; anti-MEF2C antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	MEF2C antibody detects endogenous levels of total MEF2C
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	463
Applicable Applications for anti-MEF2C antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human MEF2C
Subcellular Location	Nucleus.
Tissue Specificity	Expressed in brain and skeletal muscle.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemistry)
AAA326785 at 1/100 staining Mouse muscle tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

WB (Western Blot)
Western blot analysis of Mouse brain lysate, using MEF2C Antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-MEF2C antibody

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.

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. 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). Isoform 3 and isoform 4, which lack the repressor domain, are more active than isoform 1 and isoform 2.

Subunit Structure: Forms a complex with class II HDACs in undifferentiating cells. On myogenic differentiation, HDACs are released into the cytoplasm allowing MEF2s to interact with other proteins for activation. Interacts with EP300 in differentiating cells; the interaction acetylates MEF2C leading to increased DNA binding and activation (By similarity). Interacts with HDAC7 and CARM1 (By similarity). Interacts with HDAC4 and HDAC9; the interaction with HDACs represses transcriptional activity (PubMed:10523670, PubMed:11535832). Interacts with LPIN1. Interacts with MYOCD. Interacts with AKAP13 (By similarity). Interacts with FOXK1; the interaction inhibits MEF2C transactivation activity (By similarity). Interacts (via N-terminus) with HABP4; this interaction decreases DNA-binding activity of MEF2C in myocardial cells in response to mechanical stress (PubMed:15862299).

Post-translational Modifications: Phosphorylation on Ser-59 enhances DNA binding activity (By similarity). Phosphorylation on Ser-396 is required for Lys-391 sumoylation and inhibits transcriptional activity. Acetylated by p300 on several sites in differentiating myocytes. Acetylation on Lys-4 increases DNA binding and transactivation (By similarity). Sumoylated on Lys-391 with SUMO2 but not by SUMO1 represses transcriptional activity. Proteolytically cleaved in cerebellar granule neurons, probably by caspase 7, following neurotoxicity. Preferentially cleaves the CDK5-mediated hyperphosphorylated form which leads to neuron apoptosis and transcriptional inactivation.

Similarity: The beta domain, missing in a number of isoforms, is required for enhancement of transcriptional activity. Belongs to the MEF2 family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	196114945
NCBI GeneID	4208
NCBI Accession #	NP_001124477.1
NCBI GenBank Nucleotide #	NM_001131005.2

UniProt Accession #	Q06413 ; C9JMZ0 ; D7F7N5 ; F8W7V7
Molecular Weight	Observed: 51 kDa Predicted: 52 kDa
NCBI Official Full Name	myocyte-specific enhancer factor 2C isoform 2
NCBI Official Synonym Full Names	myocyte enhancer factor 2C
NCBI Official Symbol	MEF2C
NCBI Official Synonym Symbols	DEL5q14.3; C5DELq14.3
NCBI Protein Information	myocyte-specific enhancer factor 2C
UniProt Protein Name	Myocyte-specific enhancer factor 2C
UniProt Gene Name	MEF2C

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/mef2c-antibody-immunohistochemistry-western-blot-elisa/326785>