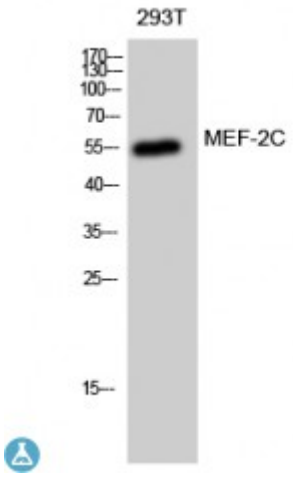
Anti-MEF-2C antibody



Description	Rabbit polyclonal to MEF-2C.

Model	STJ94067
Host	Rabbit
Reactivity	Human, Mouse
Applications	ELISA, IHC, WB
Immunogen	Synthesized peptide derived from human MEF-2C around the non-phosphorylation site of S396.
Immunogen Region	340-420 aa
Gene ID	4208
Gene Symbol	MEF2C
Dilution range	WB 1:500-1:2000IHC 1:100-1:300ELISA 1:40000
Specificity	MEF-2C Polyclonal Antibody detects endogenous levels of MEF-2C protein.
Tissue Specificity	Expressed in brain and skeletal muscle.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Myocyte-specific enhancer factor 2C Myocyte enhancer factor 2C
Molecular Weight	51 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:6996OMIM:600662
Alternative Names	Myocyte-specific enhancer factor 2C Myocyte enhancer factor 2C
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 . Isoform 3 and isoform 4, which lack the repressor domain, are more active than isoform 1 and isoform 2.
Sequence and Domain Family	The beta domain, missing in a number of isoforms, is required for enhancement of transcriptional activity.
Cellular Localization	Nucleus.
Post-translational Modifications	Phosphorylation on Ser-59 enhances DNA binding activity . Phosphorylation on Ser-396 is required for Lys-391 sumoylation and inhibits transcriptional activity. Acetylated by p300 on several sites in diffentiating myocytes. Acetylation on Lys-4 increases DNA binding and transactivation . 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.