

# MEF-2C (Phospho Ser396) Rabbit pAb

CatalogNo: YP0822 Orthogonal Validated 💽

## **Key Features**

Host Species • Rabbit	Reactivity • Human,Mouse	Applications • WB,IHC,IF,ELISA
MW • 51kD (Observed)	Isotype • IgG	

#### **Recommended Dilution Ratios**

WB 1:500-1:2000 IHC 1:100-1:300 ELISA 1:10000 IF 1:50-200

#### **Storage**

-15°C to -25°C/1 year(Do not lower than -25°C) Storage\* Formulation

#### **Basic Information**

Clonality Polyclonal

#### Immunogen Information

Immunogen The antiserum was produced against synthesized peptide derived from human MEF2C around the phosphorylation site of Ser396. AA range: 362-411

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Specificity

Phospho-MEF-2C (S396) Polyclonal Antibody detects endogenous levels of MEF-2C protein only when phosphorylated at S396.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):PVsPP

## Target Information

Gene name MEF2C

**Protein Name** Myocyte-specific enhancer factor 2C

Organism	Gene ID	UniProt ID
Human	<u>4208;</u>	<u>Q06413;</u>
Mouse	<u>17260;</u>	<u>Q8CFN5;</u>

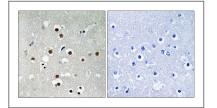
#### Cellular Nucleus . Cytoplasm, sarcoplasm .

Localization

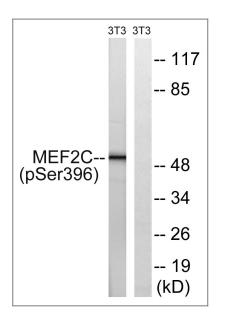
**Tissue specificity** Expressed in brain and skeletal muscle.

Alternative products: Additional isoforms seem to exist, developmental stage: Expression is **Function** highest during the early stages of postnatal development, at later stages levels greatly decrease., Domain: The beta domain, missing in a number of isoforms, is required for enhancement of transcriptional activity., 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. 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., PTM: Acetylated by p300 on several sites in diffentiating myocytes. Acetylation on Lys-4 increases DNA binding and transactivation., PTM: Phosphorylation on Ser-59 enhances DNA binding activity (By similarity). Phosphorylation on Ser-396 is required for Lys-391 sumoylation and inhibits transcriptional activity., PTM: 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., PTM: Sumoylated on Lys-391 by SUMO2 but not by SUMO1 represses transcriptional activity., similarity: Belongs to the MEF2 family., similarity: Contains 1 MADSbox domain., similarity: Contains 1 Mef2-type DNA-binding domain., subunit: 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. Interacts with HDAC7 and CARM1 (By similarity). Interacts with HDAC4, HDAC7 AND HDAC9; the interaction WITH HDACs represses transcriptional activity.,tissue specificity:Expressed in brain and skeletal muscle.,

#### Validation Data



Immunohistochemistry analysis of paraffin-embedded human brain, using MEF2C (Phospho-Ser396) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from NIH/3T3 cells treated with starved 24h, using MEF2C (Phospho-Ser396) Antibody. The lane on the right is blocked with the phospho peptide.

#### **Contact information**

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Please scan the QR code to access additional product information: MEF-2C (Phospho Ser396) Rabbit pAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Antibody | ELISA Kits | Protein | Reagents