

MEF2A Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP9258c

Specification

MEF2A Antibody (Center) Blocking Peptide - Product Information

Primary Accession <u>Q02078</u>

MEF2A Antibody (Center) Blocking Peptide - Additional Information

Gene ID 4205

Other Names

Myocyte-specific enhancer factor 2A, Serum response factor-like protein 1, MEF2A, MEF2

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP9258c was selected from the Center region of human MEF2A. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MEF2A Antibody (Center) Blocking Peptide - Protein Information

Name MEF2A

Synonyms MEF2

MEF2A Antibody (Center) Blocking Peptide - Background

MEF2A is a DNA-binding transcription factor that activates many muscle-specific, growth factor-induced, and stress-induced genes. The encoded protein can act as a homodimer or as a heterodimer and is involved in several cellular processes, including muscle development, neuronal differentiation, cell growth control, and apoptosis. Defects in this protein could be a cause of autosomal dominant coronary artery disease 1 with myocardial infarction (ADCAD1).

MEF2A Antibody (Center) Blocking Peptide - References

Wu,Y., et.al., J. Mol. Biol. 397 (2), 520-533 (2010)lshikawa,F., et.al., Oncogene 29 (6), 909-919 (2010)



Function

Transcriptional activator which binds specifically to the MEF2 element, 5'-YTA[AT](4)TAR-3', found in numerous muscle-specific genes. Also involved in the activation of numerous growth factor- and stress-induced genes. Mediates cellular functions not only in skeletal and cardiac muscle development, but also in neuronal differentiation and survival. Plays diverse roles in the control of cell growth, survival and apoptosis via p38 MAPK signaling in muscle-specific and/or growth factor-related transcription. In cerebellar granule neurons, phosphorylated and sumoylated MEF2A represses transcription of NUR77 promoting synaptic differentiation. Associates with chromatin to the ZNF16 promoter.

Cellular Location

Nucleus

{ECO:0000255|PROSITE-ProRule:PRU00251,

ECO:0000269|PubMed:12691662, ECO:0000269|PubMed:16563226}

Tissue Location

Isoform MEF2 and isoform MEFA are expressed only in skeletal and cardiac muscle and in the brain. Isoform RSRFC4 and isoform RSRFC9 are expressed in all tissues examined

MEF2A Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

• Blocking Peptides