

Anti-MEF2A Antibody

Catalog # ABO11131

Specification

Anti-MEF2A Antibody - Product Information

Application WB
Primary Accession Q02078
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

Description

Rabbit IgG polyclonal antibody for Myocyte-specific enhancer factor 2A(MEF2A) detection. Tested with WB in Human; Mouse; Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-MEF2A Antibody - Additional Information

Gene ID 4205

Other Names

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

Calculated MW 54811 MW KDa

Application Details

Western blot, 0.1-0.5 μg/ml, Human, Rat, Mouse

Subcellular Localization

Nucleus.

Tissue Specificity

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. .

Protein Name

Myocyte-specific enhancer factor 2A

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human MEF2A(358-374aa MLSLGQVSAWQQHHLGQ), different from the related mouse and rat sequences by one amino acid.

Purification



Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence SimilaritiesBelongs to the MEF2 family.

Anti-MEF2A Antibody - Protein Information

Name MEF2A

Synonyms MEF2

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

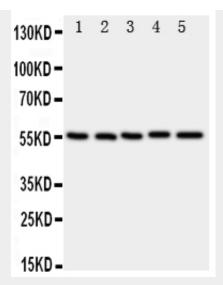
Anti-MEF2A Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-MEF2A Antibody - Images





Anti-MEF2A antibody, ABO11131, Western blottingAll lanes: Anti MEF2A (ABO11131) at 0.5ug/mlLane 1: Rat Heart Tissue Lysate at 50ugLane 2: HELA Whole Cell Lysate at 40ugLane 3: HT1080Whole Cell Lysate at 40ugLane 4: MM231 Whole Cell Lysate at 40ugLane 5: COLO320 Whole Cell Lysate at 40ugPredicted bind size: 55KDObserved bind size: 55KD

Anti-MEF2A Antibody - Background

MEF2A(myocyte enhancer factor 2A) also known as RSRFC4, RSRFC9, is a protein that in humans is encoded by the MEF2A gene. MEF2A is a transcription factor in the Mef2 family. Several alternative splice variants of MEF2A were identified that were predicted to encode different protein products. Using immunofluorescence, MEF2A protein was detected in the nuclei of skeletal and cardiac muscle cells. The MEF2A gene is mapped on 15q26.3. MEF2A may be involved in induction of muscle differentiation and MEF2C in maintenance of the differentiated state. Coimmunoprecipitation assays indicated that GEF bound both MEF2A and MEF2D in vitro, and MEF2D interfered with the transcriptional activation promoted by the cooperative interaction of MEF2A and GEF. A transcriptional repressor form of MEF2AÂ that is sumoylated at lys403 promoted dendritic claw differentiation.