

Rabbit MEF2D Polyclonal Antibody | anti-MEF2D antibody

Phospho-MEF2D (Ser180) Antibody

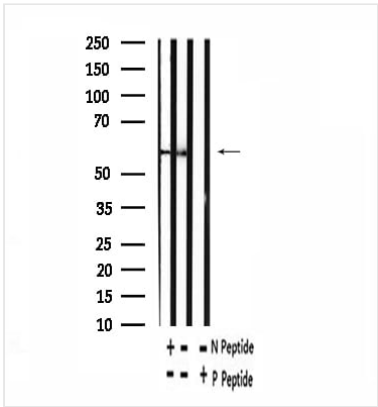
CATALOG # AAA328515	HOST Rabbit	REACTIVITY Human, Mouse, Rat Predicted: Pig, Zebrafish, Horse, Rabbit, Dog, Chicken, Xenopus	APPLICATIONS ELISA, Immunohistochemistry, Western Blot
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PRODUCT SYNONYMS

MEF2D; Polyclonal Antibody; Phospho-MEF2D (Ser180) Antibody; DKFZp686l1536; MADS box transcription factor 2 polypeptide D; Mef2d; MEF2D_HUMAN; Myocyte enhancer factor 2D; Myocyte specific enhancer factor 2; polypeptide D; Myocyte specific enhancer factor 2D; Myocyte-specific enhancer factor 2D; anti-MEF2D antibody

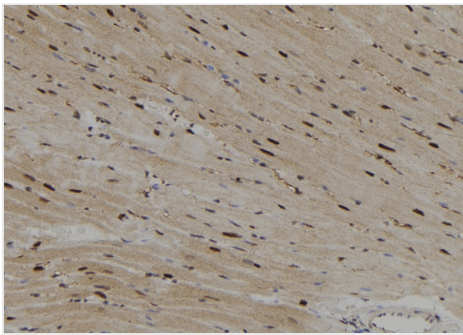
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted: Pig, Zebrafish, Horse, Rabbit, Dog, Chicken, Xenopus
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-MEF2D (Ser180) Antibody detects endogenous levels of MEF2D only when phosphorylated at Ser180.
Purity/Purification	Purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
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	514
Applicable Applications for anti-MEF2D antibody	ELISA (Peptide ELISA), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human MEF2D around the phosphorylation site of Ser180.
Tissue Specificity	Present in myotubes and also in undifferentiated myoblasts.
Subcellular Location	Nucleus
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



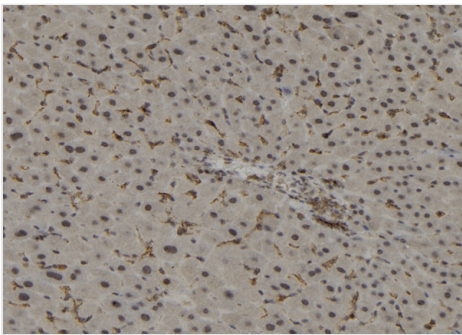
WB (Western Blot)

Western blot analysis of Phospho-MEF2D (Ser180) in lysates of HepG2 cells treated with forskolin (40nM, 30'), using Phospho-MEF2D (Ser180) Antibody.



IHC (Immunohistochemistry)

At 1/100 staining rat heart tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue 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



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At 1/100 staining mouse liver tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue 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

ADDITIONAL INFORMATION

Related Product Information for anti-MEF2D antibody

Description: Transcriptional activator which binds specifically to the MEF2 element, 5'-YTA[AT]4TAR-3', found in numerous muscle-specific, 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. Plays a critical role in the regulation of neuronal apoptosis (By similarity).

Post Translational Modifications: Phosphorylated on Ser-444 by CDK5 is required for Lys-439 sumoylation and inhibits transcriptional activity. In neurons, enhanced CDK5 activity induced by neurotoxins promotes caspase 3-mediated cleavage leading to neuron apoptosis. Phosphorylation on Ser-180 can be enhanced by EGF. Phosphorylated and activated by CaMK4. Acetylated on Lys-439 by CREBBP. Acetylated by EP300. Deacetylated by SIRT1 and HDAC3. Sumoylated on Lys-439 with SUMO2 but not SUMO1; which inhibits transcriptional activity and myogenic activity. Desumoylated by SENP3. Proteolytically cleaved in cerebellar granule neurons on several sites by caspase 7 following neurotoxicity. Preferentially cleaves the CDK5-mediated hyperphosphorylated form which leads to neuron apoptosis and transcriptional inactivation (By similarity).

Subunit Structure: Interacts with MYOG (By similarity). 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 HDAC4 (in undifferentiating cells); the interaction translocates MEF2D to nuclear dots. Forms a heterodimer with MEF2A. Interacts with MAPK7; the interaction phosphorylates but does not activate MEF2D (By similarity). Interacts with CCAR2 and HDAC3.

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 #	410442515
NCBI GeneID	4209
NCBI Accession #	NP_001258558.1
NCBI GenBank Nucleotide #	NP_001258558.1
UniProt Accession #	Q14814
Molecular Weight	Observed: 56 kDa Predicted: 56 kDa
NCBI Official Full Name	myocyte-specific enhancer factor 2D isoform 2
NCBI Official Synonym Full Names	myocyte enhancer factor 2D
NCBI Official Symbol	MEF2D
NCBI Protein Information	myocyte-specific enhancer factor 2D
UniProt Protein Name	Myocyte-specific enhancer factor 2D
UniProt Gene Name	MEF2D
UniProt Entry Name	MEF2D_HUMAN

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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/mef2d-antibody-peptide-elisa-immunohistochemistry-western-blot-elisa/328515>