

## Datasheet for ABIN966557 anti-MEF2D antibody (N-Term)

4 Publications



## Overview

Quantity:	0.1 mg
Target:	MEF2D
Binding Specificity:	N-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This MEF2D antibody is un-conjugated
Application:	Immunohistochemistry (IHC)
Product Details	
Immunogen:	Polyclonal antibody produced in rabbits immunizing with a synthetic peptide corresponding to
	N-terminal residues of human MEF2D (Myocyte-specific enhancer factor 2D)
Target Details	
Target:	MEF2D
Alternative Name:	MEF2D (MEF2D Products)
Background:	MEF2D (Myocyte-specific enhancer factor 2D) is a transcriptional activator which binds
	specifically to the MEF2 element, 5'-YTA[AT](4)TAR-3', found in numerous muscle-specific,
	growth factor- and stress-induced genes. MEF2D mediates cellular functions not only in
	skeletal and cardiac muscle development, but also in neuronal differentiation and survival.
	MEF2D plays diverse roles in the control of cell growth, survival and apoptosis via p38 MAPK

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 1/2 | Product datasheet for ABIN966557 | 07/26/2024 | Copyright antibodies-online. All rights reserved. signaling in muscle-specific and/or growth factor-related transcription. MEF2D plays a critical role in the regulation of neuronal apoptosis (By similarity). MEF2D 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. 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. Phsophorylation on Ser-180 can be enhanced by EGF.

## **Application Details**

Restrictions:	For Research Use only
Handling	
Storage:	4 °C
Publications	
Product cited in:	Okamoto, Li, Ju, Scholzke, Mathews, Cui, Salvesen, Bossy-Wetzel, Lipton: "Dominant-interfering
	forms of MEF2 generated by caspase cleavage contribute to NMDA-induced neuronal
	apoptosis." in: Proceedings of the National Academy of Sciences of the United States of
	America, Vol. 99, Issue 6, pp. 3974-9, (2002) (PubMed).
	Kato, Zhao, Morikawa, Sugiyama, Chakravortty, Koide, Yoshida, Tapping, Yang, Yokochi, Lee: "
	Big mitogen-activated kinase regulates multiple members of the MEF2 protein family." in: <b>The</b>
	Journal of biological chemistry, Vol. 275, Issue 24, pp. 18534-40, (2000) (PubMed).
	Zhao, New, Kravchenko, Kato, Gram, di Padova, Olson, Ulevitch, Han: "Regulation of the MEF2
	family of transcription factors by p38." in: Molecular and cellular biology, Vol. 19, Issue 1, pp.
	21-30, (1999) (PubMed).
	Breitbart, Liang, Smoot, Laheru, Mahdavi, Nadal-Ginard: "A fourth human MEF2 transcription
	factor, hMEF2D, is an early marker of the myogenic lineage." in: Development (Cambridge,
	<b>England)</b> , Vol. 118, Issue 4, pp. 1095-106, (1994) (PubMed).

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