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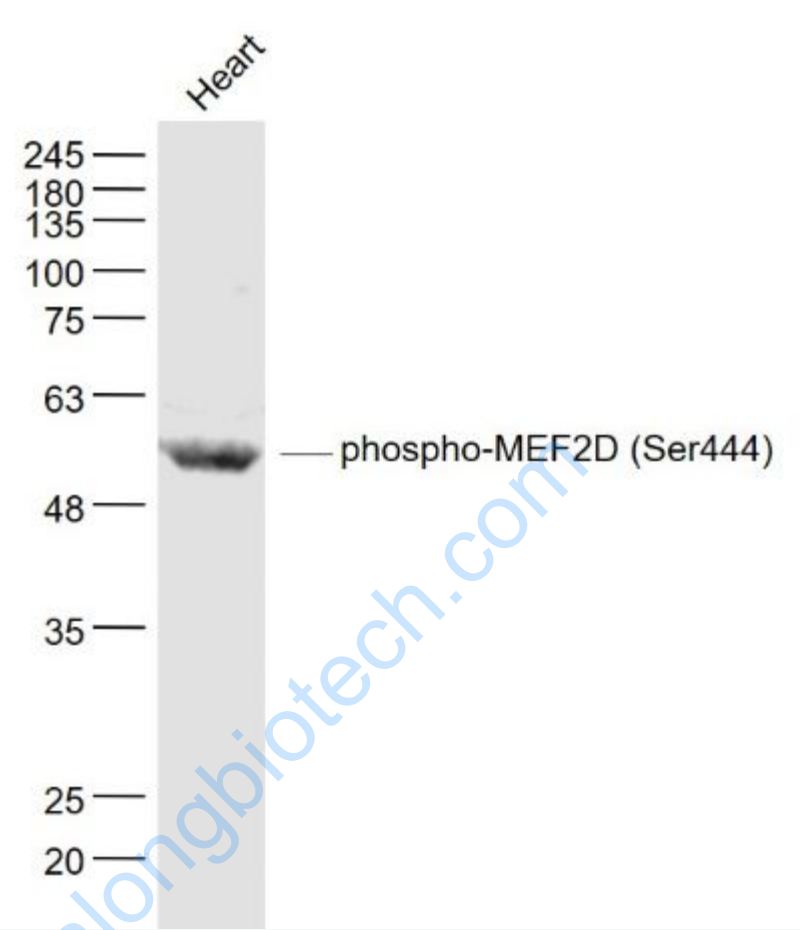
Rabbit Anti-phospho-MEF2D (Ser444) antibody

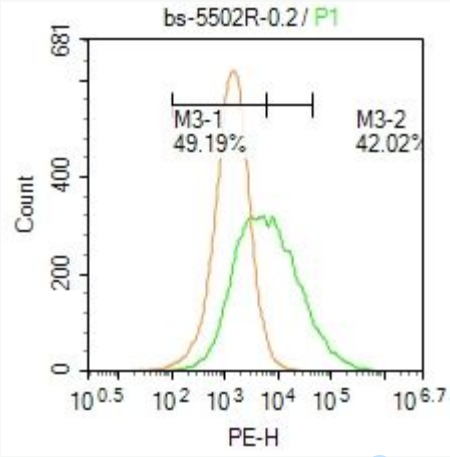
SL5502R

Product Name:	phospho-MEF2D (Ser444)
Chinese Name:	磷酸化肌细胞特异性增强因子2D抗体
Alias:	MEF2D (phospho S444); p-MEF2D (phospho S444); MEF2D(phospho Ser444); DKFZp686I1536; 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.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=0.2ug/testIF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	56kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human MEF2D around the phosphorylation site of Ser444:PV(p-S)PS
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	MEF2D is a member of the myocyte-specific enhancer factor 2 (MEF2) family of

	transcription factors. Members of this family are involved in control of muscle and neuronal cell differentiation and development, and are regulated by class II histone deacetylases. Fusions of the encoded protein with Deleted in Azoospermia-Associated Protein 1 (DAZAP1) due to a translocation have been found in an acute lymphoblastic leukemia cell line, suggesting a role in leukemogenesis. The encoded protein may also be involved in Parkinson disease and myotonic dystrophy. Alternative splicing results in multiple transcript variants. **Function:** 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. 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). **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 HDAC4 (in undifferentiating cells); the interaction translocates MEF2D to nuclear dots. Forms a heterodimer with MEF2A. **Subcellular Location:** Nucleus. Note=Translocated by HDAC4 to nuclear dots. **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. Deacetylated by SIRT1. 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). **Similarity:** Belongs to the MEF2 family. Contains 1 MADS-box domain. Contains 1 Mef2-type DNA-binding domain. **SWISS:** Q14814

	Gene ID: 4209 **Database links:** Entrez Gene: 4209Human Entrez Gene: 17261Mouse Entrez Gene: 81518Rat Omim: 600663Human SwissProt: Q14814Human SwissProt: Q63943Mouse SwissProt: O89038Rat Unigene: 314327Human Unigene: 28184Mouse Unigene: 89018Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. MEF2D及其家族中的其他成员，在细胞存活、分化起着重要的作用。

Picture:	 Sample: Heart (Mouse) Lysate at 40 ug Primary: Anti- phospho-MEF2D (Ser444) (SL5502R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 56 kD Observed band size: 56 kD



Blank control: Hela.

Primary Antibody (green line): Rabbit Anti-phospho-MEF2D(Ser444) antibody (SL5502R)

Dilution: 1μg /10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-PE

Dilution: 0.2μg /test.

Protocol

The cells were incubated in 5 %BSA to block non-specific protein-protein interactions for 30 min at at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.