

**产品名称:** Phospho-MEF-2D (Ser444) Rabbit Polyclonal Antibody

**产品货号:** APRab04998

### 产品概述 (Summary)

|                   |                                                                                                   |
|-------------------|---------------------------------------------------------------------------------------------------|
| 描述(Description)   | Rabbit polyclonal Antibody                                                                        |
| 宿主(Host)          | Rabbit                                                                                            |
| 应用(Application)   | WB,IHC,ICC/IF,ELISA                                                                               |
| 种属反应(Reactivity)  | Human,Mouse,Rat                                                                                   |
| 偶联物(Conjugation)  | Unconjugated                                                                                      |
| 修饰(Modification)  | Phosphorylated                                                                                    |
| 同种型(Isotype)      | IgG                                                                                               |
| 克隆(Clonality)     | Polyclonal                                                                                        |
| 剂型(Form)          | Liquid                                                                                            |
| 保存条件(Storage)     | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.          |
| 储存溶液(Buffer)      | Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N. |
| 纯化 (Purification) | Affinity purification                                                                             |

### 产品应用(Application)

|                       |                                                                        |
|-----------------------|------------------------------------------------------------------------|
| 稀释比(Dilution Ratio)   | WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000 |
| 分子量(Molecular Weight) | 55kDa                                                                  |

### 抗原信息(Antigen Information)

|                       |                                                                                                                                             |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| 基因名(Gene Name)        | MEF2D                                                                                                                                       |
| 别名(Alternative Names) | MEF2D; Myocyte-specific enhancer factor 2D                                                                                                  |
| 基因 ID(Gene ID)        | 4209.0                                                                                                                                      |
| SwissProt ID          | Q14814                                                                                                                                      |
| 免疫原(Immunogen)        | The antiserum was produced against synthesized peptide derived from human MEF2D around the phosphorylation site of Ser444. AA range:410-459 |

### 研究背景 (Background)

This gene 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

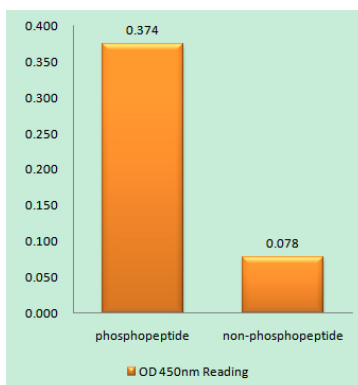
deacetylases. Fusions of the encoded protein with Deleted in Azoospermia-Associated Protein 1 (DAZAP1) due to a translocation have been found in an acute lymphoblastic leukemia cell line, suggesting a role in leukemogenesis. The encoded protein may also be involved in Parkinson disease and myotonic dystrophy. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2012],developmental stage:Present in myotubes and also in undifferentiated myoblasts.,domain:The beta domain, missing in a number of isoforms, is required for enhancement of transcriptional activity.,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.,PTM:Acetylated on Lys-439 by CREBBP. Deacetylated by SIRT1.,PTM: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.,PTM: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.,PTM:Sumoylated on Lys-439 by SUMO2 but not SUMO1; which inhibits transcriptional activity and myogenic activity. Desumoylated by SENP3.,similarity:Belongs to the MEF2 family.,similarity:Contains 1 MADS-box domain.,similarity:Contains 1 Mef2-type DNA-binding domain.,subcellular location:Translocated by HDAC4 to nuclear dots.,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.,

## 研究领域 (Research Area)

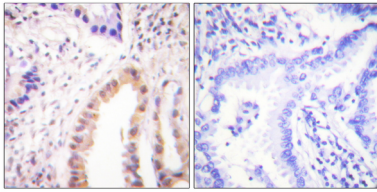
## 注意事项 (Note)

For research use only.

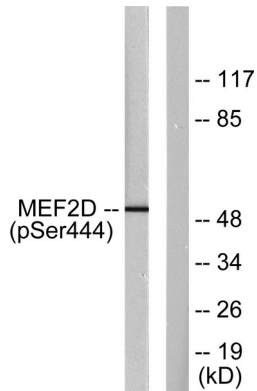
## 图片 (Image Data)



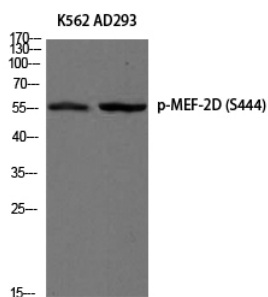
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using MEF2D (Phospho-Ser444) Antibody



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma, using MEF2D (Phospho-Ser444) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HepG2 cells treated with forskolin 40nM 30', using MEF2D (Phospho-Ser444) Antibody. The lane on the right is blocked with the phospho peptide.



Western blot analysis of K562 AD293 using Phospho-MEF-2D (S444) antibody. Antibody was diluted at 1:500

## EnkiLife 优势产品推荐

| 产品类别                        | 产品货号     | 产品名称                                               |
|-----------------------------|----------|----------------------------------------------------|
| WB 解决方案                     | RA10020  | 2h 极速 WB 即用型全流程试剂盒                                 |
|                             | RA10021  | 4h 快速 WB 即用型全流程试剂盒                                 |
|                             | RA10042  | 5h 畅享版 WB 全流程试剂盒                                   |
|                             | RA10037  | 校准级彩色预染蛋白 Marker (8-180kDa)                        |
|                             | RA10038  | 校准级彩色预染蛋白 Marker (10-250kDa)                       |
|                             | RA10039  | 校准级高分子彩色预染蛋白 Marker (25-400kDa)                    |
| TSA 多重荧光染色试剂盒               | RA10008  | TSA 双标三色多重荧光染色试剂盒 (mIHC)                           |
|                             | RA10009  | TSA 三标四色多重荧光染色试剂盒 (mIHC)                           |
|                             | RA10010  | TSA 四标五色多重荧光染色试剂盒 (mIHC)                           |
|                             | RA10011  | TSA 五标六色多重荧光染色试剂盒 (mIHC)                           |
|                             | RA10012  | TSA 六标七色多重荧光染色试剂盒 (mIHC)                           |
| IHC 检测试剂盒                   | RA10006  | HRP Anti-Mouse/Rabbit IHC Detection System         |
|                             | RA10007  | Polymer-HRP Anti-Mouse/Rabbit IHC Detection System |
| 抗体标记试剂盒                     | RE80004p | 辣根过氧化物酶(HRP)抗体标记试剂盒                                |
|                             | RE80002q | Sulfo-NHS-生物素标记试剂盒                                 |
|                             | RE80007p | Cy3 荧光素标记试剂盒                                       |
|                             | RE80011p | Fluor488 荧光素标记试剂盒                                  |
|                             | RE80017p | Fluor750 荧光素标记试剂盒                                  |
|                             | RE80005p | 藻红蛋白(R-PE) 抗体快速标记试剂盒                               |
|                             | RE80040  | PE-Cy7 串联染料抗体快速标记试剂盒                               |
| 稳转细胞系构建服务<br>(免费赠送全膜 WB 验证) | TS-0001  | 过表达稳转细胞系构建                                         |
|                             | TS-0002  | 敲低稳转细胞系构建                                          |
|                             | TS-0003  | 敲除细胞系构建                                            |

限于篇幅，更多产品详见官网：<https://www.enkilife.cn>