

**产品名称:** Phospho-IRS-1 (Ser794) Rabbit Polyclonal Antibody

**产品货号:** APRab04883

### 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 1:200-1:1000,ELISA 1:20000-1:40000 |
| 分子量(Molecular Weight) | 170kDa                                                                    |

### 抗原信息(Antigen Information)

|                       |                                                                                                                                             |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| 基因名(Gene Name)        | IRS1                                                                                                                                        |
| 别名(Alternative Names) | IRS1; Insulin receptor substrate 1; IRS-1                                                                                                   |
| 基因 ID(Gene ID)        | 3667.0                                                                                                                                      |
| SwissProt ID          | P35568                                                                                                                                      |
| 免疫原(Immunogen)        | The antiserum was produced against synthesized peptide derived from human IRS-1 around the phosphorylation site of Ser794. AA range:760-809 |

### 研究背景 (Background)

This gene encodes a protein which is phosphorylated by insulin receptor tyrosine kinase. Mutations in this gene are associated with type II diabetes and susceptibility to insulin resistance. [provided by RefSeq, Nov 2009],disease:Polymorphisms in IRS1

may be involved in the etiology of non-insulin-dependent diabetes mellitus (NIDDM) [MIM:125853],function:May mediate the control of various cellular processes by insulin. When phosphorylated by the insulin receptor binds specifically to various cellular proteins containing SH2 domains such as phosphatidylinositol 3-kinase p85 subunit or GRB2. Activates phosphatidylinositol 3-kinase when bound to the regulatory p85 subunit.,polymorphism:The Arg-971 polymorphism impairs the ability of insulin to stimulate glucose transport, glucose transporter translocation, and glycogen synthesis by affecting the PI3K/AKT1/GSK3 signaling pathway. The polymorphism at Arg-971 may contribute to the in vivo insulin resistance observed in carriers of this variant. Arg-971 could contribute to the risk for atherosclerotic cardiovascular diseases associated with non-insulin-dependent diabetes mellitus (NIDDM) by producing a cluster of insulin resistance-related metabolic abnormalities. In insulin-stimulated human endothelial cells from carriers of the Arg-971 polymorphism, genetic impairment of the IRS1/PI3K/PDPK1/AKT1 insulin signaling cascade results in impaired insulin-stimulated nitric oxide (NO) release and suggested that this may be a mechanism through which the Arg-971 polymorphism contributes to the genetic predisposition to develop endothelial dysfunction and cardiovascular disease. The Arg-971 polymorphism not only reduces phosphorylation of the substrate but allows IRS1 to act as an inhibitor of PI3K, producing global insulin resistance.,PTM:Phosphorylation of Tyr-896 is required for GRB2-binding.,PTM:Serine phosphorylation of IRS1 is a mechanism for insulin resistance. Ser-312 phosphorylation inhibits insulin action through disruption of IRS1 interaction with the insulin receptor.,similarity:Contains 1 IRS-type PTB domain.,similarity:Contains 1 PH domain.,subunit:Interacts with the NPXY motif of tyrosine-phosphorylated IGF1R and INSR via the PTB domain. Binds to phosphatidylinositol 3-kinase p85 subunit via the phosphorylated YXXM motifs. Binds ROCK1. Binds to UBTF and PIK3CA in nuclear extracts (By similarity). Interacts with SOCS7.,

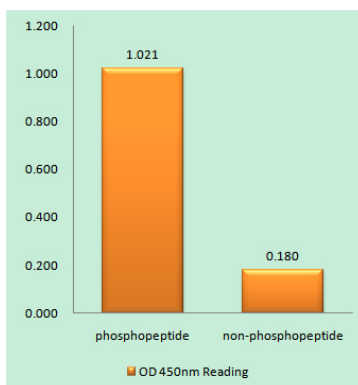
## 研究领域 (Research Area)

Neurotrophin;Insulin\_Receptor;Adipocytokine;Type II diabetes mellitus;Aldosterone-regulated sodium reabsorption;

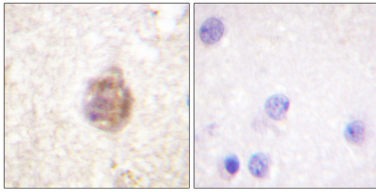
## 注意事项 (Note)

For research use only.

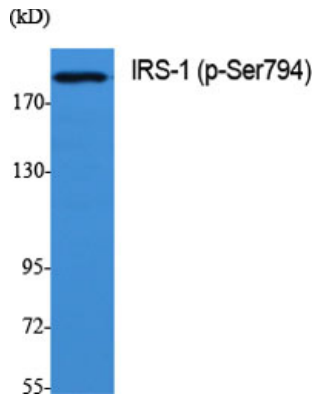
## 图片 (Image Data)



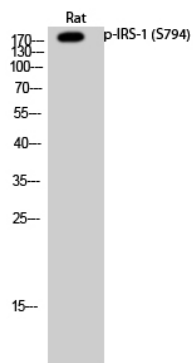
Enzyme-Linked Immunosorbent Assay ( Phospho-ELISA ) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right) , using IRS-1 (Phospho-Ser794) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using IRS-1 (Phospho-Ser794) Antibody. The picture on the right is blocked with the phosphopeptide.



Western Blot analysis of various cells using Phospho-IRS-1 (S794) Polyclonal Antibody diluted at 1: 500



Western Blot analysis of Rat cells using Phospho-IRS-1 (S794) Polyclonal Antibody 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>