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# Rabbit Anti-phospho-IRS1 (Ser323) antibody

## SL12709R

| Product Name: | phospho-IRS1 (Ser323) |
|---|---|
| Chinese Name: | 磷酸化胰岛素受体底物1抗体 |
| Alias: | IRS1 (phospho S323); p-IRS1 (phospho S323); HIRS 1; HIRS1; Insulin Receptor Substrate 1; IRS 1; IRS-1; IRS1; IRS1_HUMAN; OTTHUMP00000164234 |
| | |
| Organism Species: | Rabbit |
| Clonality: | Polyclonal |
| React Species: | Human,Mouse,Rat,Rabbit, |
| Applications: | WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1μg/TestICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair）not yet tested in other applications.<br>optimal dilutions/concentrations should be determined by the end user. |
| Molecular weight: | 132kDa |
| Cellular localization: | The cell membrane |
| Form: | Lyophilized or Liquid |
| Concentration: | 1mg/ml |
| immunogen: | KLH conjugated synthesised phosphopeptide derived from human IRS1 around the phosphorylation site of Ser323:PG(p-S)FR |
| 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: | 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] |

**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.

**Subcellular Location:**
Membrane; Single-pass type I membrane protein.

**Tissue Specificity:**
Isoform Long and isoform Short are predominantly expressed in tissue targets of insulin metabolic effects: liver, adipose tissue and skeletal muscle but are also expressed in the peripheral nerve, kidney, pulmonary alveoli, pancreatic acini, placenta vascular endothelium, fibroblasts, monocytes, granulocytes, erythrocytes and skin. Isoform Short is preferentially expressed in fetal cells such as fetal fibroblasts, muscle, liver and kidney. Found as a hybrid receptor with IGF1R in muscle, heart, kidney, adipose tissue, skeletal muscle, hepatoma, fibroblasts, spleen and placenta (at protein level). Overexpressed in several tumors, including breast, colon, lung, ovary, and thyroid carcinomas.

**Post-translational modifications:**
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.
Phosphorylation of Tyr-896 is required for GRB2-binding.

**DISEASE:**
The gene represented in this entry may be involved in disease pathogenesis.
Disease description:A multifactorial disorder of glucose homeostasis caused by a lack of sensitivity to the body's own insulin. Affected individuals usually have an obese body habitus and manifestations of a metabolic syndrome characterized by diabetes, insulin resistance, hypertension and hypertriglyceridemia. The disease results in long-term complications that affect the eyes, kidneys, nerves, and blood vessels.

**Similarity:**
Contains 1 IRS-type PTB domain.
Contains 1 PH domain.

**SWISS:**
P35568

**Gene ID:**
3667

**Database links:**

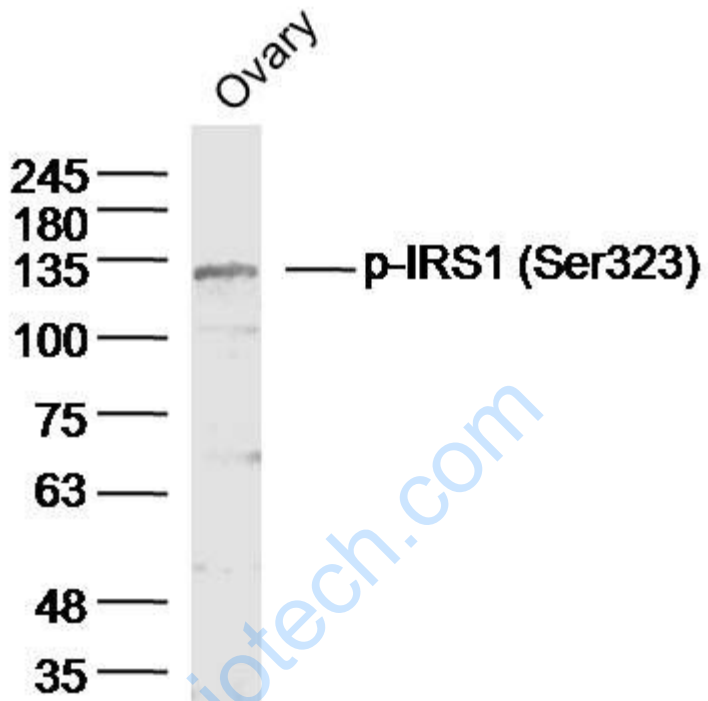| | |
|---|---|
| | Entrez Gene: 3667 Human |
| | Entrez Gene: 16367 Mouse |
| | Entrez Gene: 25467 Rat |
| | Omim: 147545 Human |
| | SwissProt: P35568 Human |
| | SwissProt: P35569 Mouse |
| | SwissProt: P35570 Rat |
| | Unigene: 471508 Human |
| | Unigene: 4952 Mouse |
| | Unigene: 10476 Rat |
| | **Important Note:**<br>This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |

| **Picture:** | 
|  | Sample:Ovary (Mouse) Lysate at 40 ug |
|  | Primary: Anti-phospho-IRS1 (Ser323)(SL12709R)at 1/300 dilution |
|  | Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution |
|  | Predicted band size: 132kD |
|  | Observed band size: 132kD |
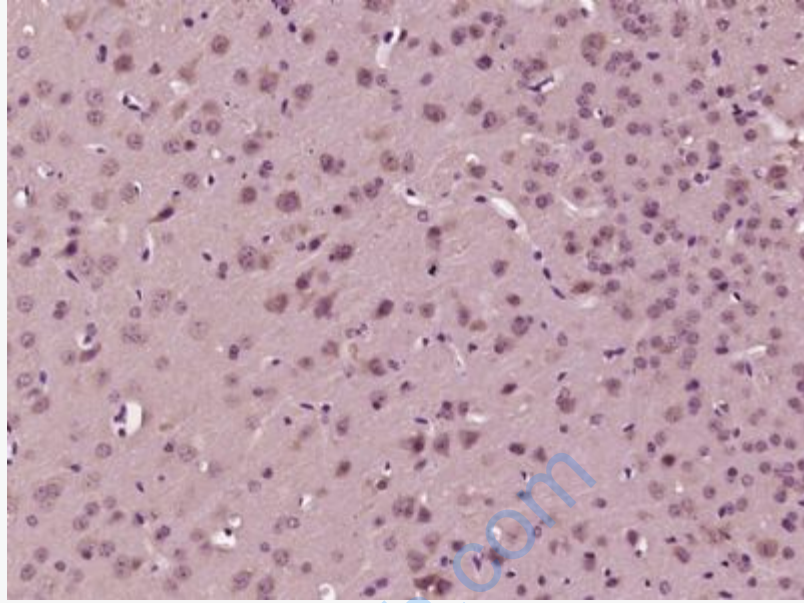
Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-IRS1 (Ser323)) Polyclonal Antibody, Unconjugated (SL12709R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.
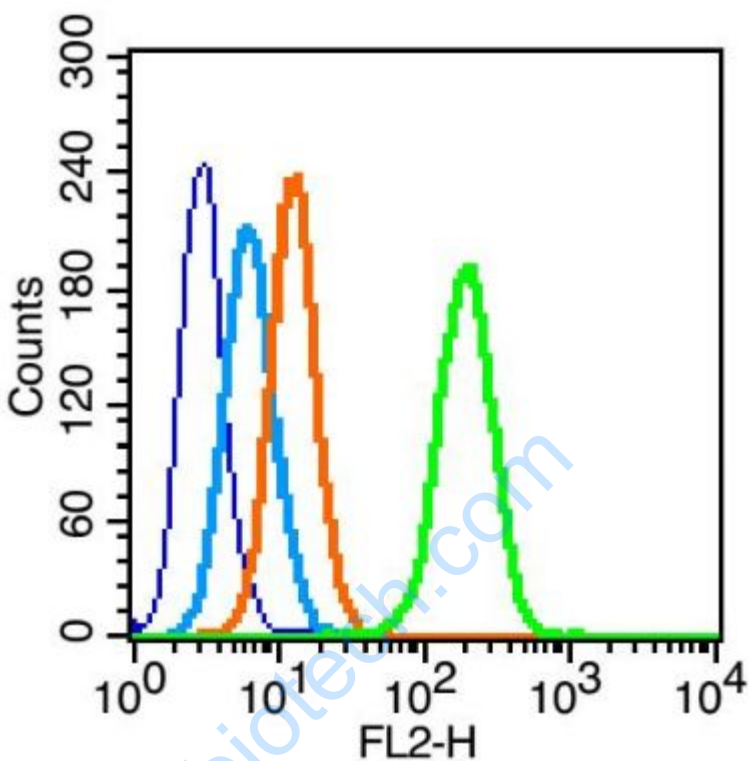
Blank control (blue line): Hela (fixed with 70% ethanol (Overnight at 4℃) and then permeabilized with 0.1% PBS-Tween for 20 min at room temperature).

Primary Antibody (green line): Rabbit Anti-phospho-IRS1 (Ser323) antibody (SL12709R),Dilution: 0.2μg /10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE,Dilution: 1μg /test.