

IRS-1 (phospho Ser616) Polyclonal Antibody

Catalog No: YP0640

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: IRS-1

Fields: >>cGMP-PKG signaling pathway;>>FoxO signaling pathway;>>Autophagy -

animal;>>mTOR signaling pathway;>>PI3K-Akt signaling pathway;>>AMPK signaling pathway;>>Longevity regulating pathway;>>Longevity regulating pathway - multiple species;>>Neurotrophin signaling pathway;>>Insulin signaling

pathway;>>Adipocytokine signaling pathway;>>Regulation of lipolysis in

adipocytes;>>Type II diabetes mellitus;>>Insulin resistance;>>Non-alcoholic fatty liver disease;>>Growth hormone synthesis, secretion and action;>>Aldosterone-

regulated sodium reabsorption;>>Alzheimer disease;>>MicroRNAs in

cancer;>>Diabetic cardiomyopathy

Gene Name: IRS1

Protein Name: Insulin receptor substrate 1

P35568

P35569

Human Gene Id: 3667

Human Swiss Prot

No:

Mouse Gene Id: 16367

Mouse Swiss Prot

No:

Rat Gene Id: 25467

Rat Swiss Prot No: P35570

Immunogen: The antiserum was produced against synthesized peptide derived from human

IRS-1 around the phosphorylation site of Ser612. AA range:578-627

Specificity: Phospho-IRS-1 (S616) Polyclonal Antibody detects endogenous levels of IRS-1

protein only when phosphorylated at S616.



Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. Formulation:

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

-15°C to -25°C/1 year(Do not lower than -25°C) **Storage Stability:**

Observed Band: 170kD

Neurotrophin;Insulin_Receptor;Adipocytokine;Type II diabetes **Cell Pathway:**

mellitus: Aldosterone-regulated sodium reabsorption:

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],

Function: 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

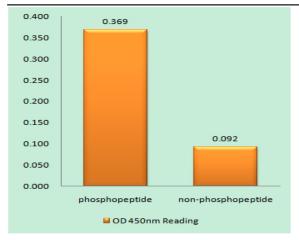
cardiovascular diseases associated with non-insulin-dependen

nucleus,cytoplasm,cytosol,plasma membrane,insulin receptor Subcellular Location:

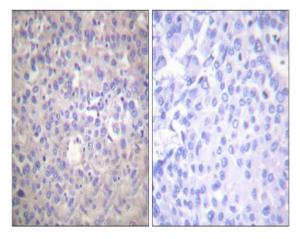
complex, caveola, intracellular membrane-bounded organelle,

Epithelium, Eye, Skeletal muscle, **Expression:**

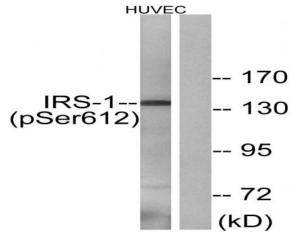
Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using IRS-1 (Phospho-Ser612) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using IRS-1 (Phospho-Ser612) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HUVEC cells treated with insulin 0.01U/ml 30', using IRS-1 (Phospho-Ser612) Antibody. The lane on the right is blocked with the phospho peptide.