

IRS-1 (phospho Ser307) Polyclonal Antibody

Catalog No: YP0147

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 Ser307. AA range:274-323

Specificity: Phospho-IRS-1 (S307) Polyclonal Antibody detects endogenous levels of IRS-1

protein only when phosphorylated at S307.



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

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not

yet tested in other applications.

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

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

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

Observed Band: 170kD

Cell Pathway: Neurotrophin;Insulin Receptor;Adipocytokine;Type II diabetes

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

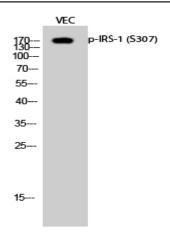
cardiovascular diseases associated with non-insulin-dependen

Subcellular Location:

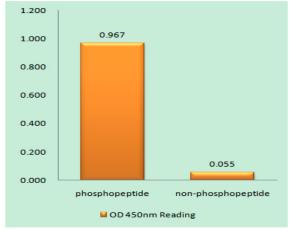
nucleus, cytoplasm, cytosol, plasma membrane, insulin receptor complex, caveola, intracellular membrane-bounded organelle,

Expression : Epithelium, Eye, Skeletal muscle,

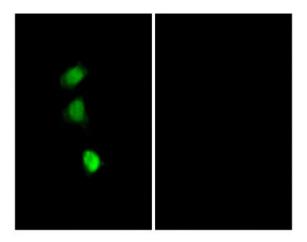
Products Images



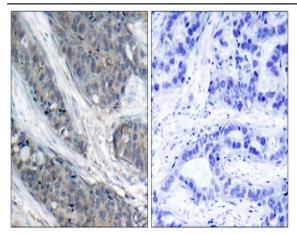
Western Blot analysis of VEC cells using Phospho-IRS-1 (S307) Polyclonal Antibody diluted at 1:1000



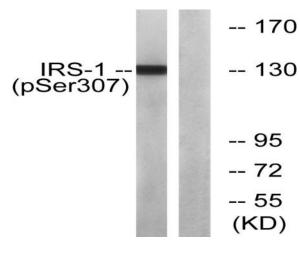
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using IRS-1 (Phospho-Ser307) Antibody



Immunofluorescence analysis of COS7 cells, using IRS-1 (Phospho-Ser307) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using IRS-1 (Phospho-Ser307) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from K562 cells, using IRS-1 (Phospho-Ser307) Antibody. The lane on the right is blocked with the phospho peptide.