

**IRS-1 (phospho Ser307) Polyclonal Antibody**

<b>Catalog No :</b>	YP0147
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	IRS-1
<b>Fields :</b>	>>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
<b>Gene Name :</b>	IRS1
<b>Protein Name :</b>	Insulin receptor substrate 1
<b>Human Gene Id :</b>	3667
<b>Human Swiss Prot No :</b>	P35568
<b>Mouse Gene Id :</b>	16367
<b>Mouse Swiss Prot No :</b>	P35569
<b>Rat Gene Id :</b>	25467
<b>Rat Swiss Prot No :</b>	P35570
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human IRS-1 around the phosphorylation site of Ser307. AA range:274-323
<b>Specificity :</b>	Phospho-IRS-1 (S307) Polyclonal Antibody detects endogenous levels of IRS-1 protein only when phosphorylated at S307.

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<b>Formulation :</b>	<u>Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.</u>
<b>Source :</b>	<u>Polyclonal, Rabbit,IgG</u>
<b>Dilution :</b>	<u>WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.</u>
<b>Purification :</b>	<u>The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.</u>
<b>Concentration :</b>	<u>1 mg/ml</u>
<b>Storage Stability :</b>	<u>-15°C to -25°C/1 year(Do not lower than -25°C)</u>
<b>Observed Band :</b>	<u>170kD</u>
<b>Cell Pathway :</b>	<u>Neurotrophin;Insulin_Receptor;Adipocytokine;Type II diabetes mellitus;Aldosterone-regulated sodium reabsorption;</u>
<b>Background :</b>	<u>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],</u>
<b>Function :</b>	<u>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</u>
<b>Subcellular Location :</b>	<u>nucleus,cytoplasm,cytosol,plasma membrane,insulin receptor complex,caveola,intracellular membrane-bounded organelle,</u>
<b>Expression :</b>	<u>Epithelium,Eye,Skeletal muscle,</u>
<b>Sort :</b>	<u>8684</u>
<b>No2 :</b>	<u>2381T</u>

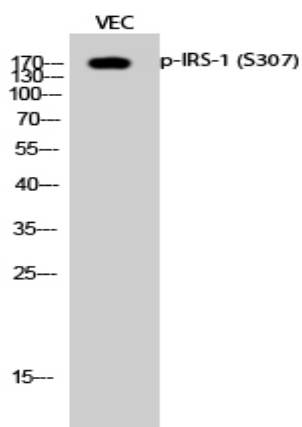
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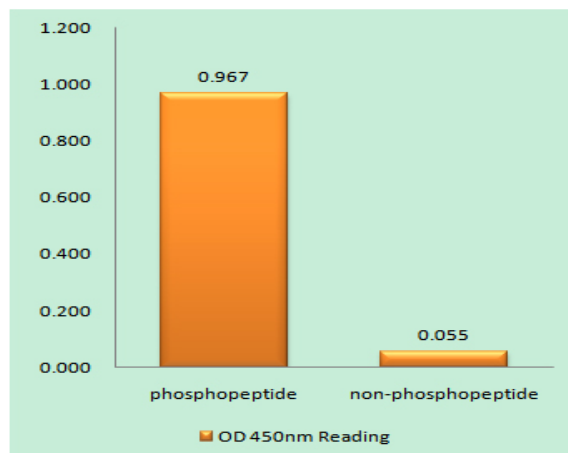
<b>No4 :</b>	<u>1</u>
<b>Host :</b>	<u>Rabbit</u>
<b>Modifications :</b>	<u>Phospho</u>

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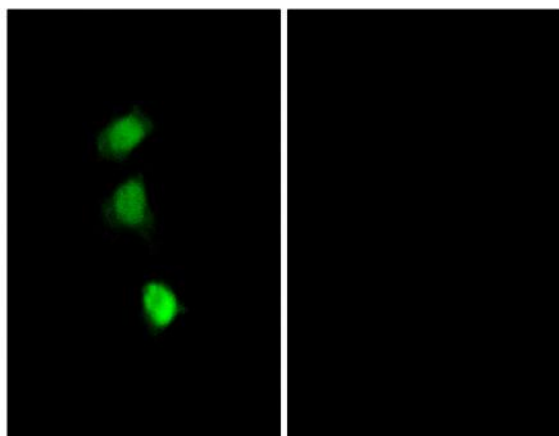
## Products Images



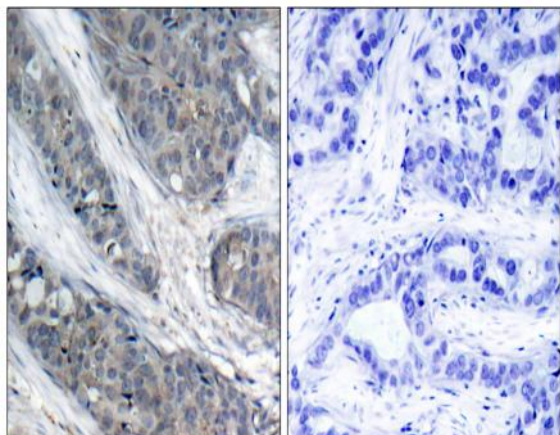
Western Blot analysis of VEC cells using Phospho-IRS-1 (S307) Polyclonal Antibody diluted at 1:1000



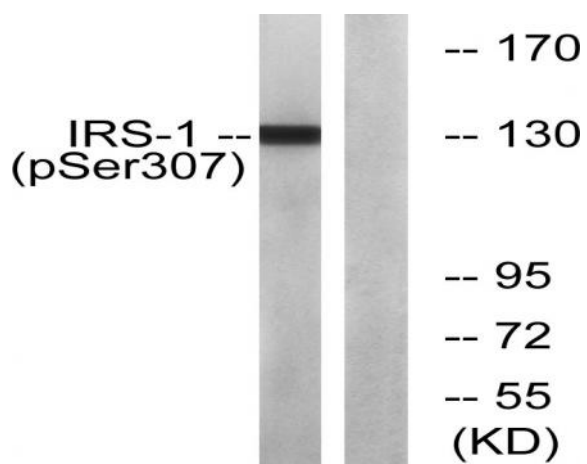
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using IRS-1 (Phospho-Ser307) Antibody



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.