



IRS-1 (phospho Ser307) Polyclonal Antibody

Catalog No	YP-Ab-03524
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	IRS1
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
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	IRS1 (Ser307);P IRS1 (Ser307);Phospho IRS1;Phospho IRS1 (Ser307); Phospho-IRS1;IRS-1;IRS1;Insulin receptor substrate 1
Observed Band	170kD
Calculated Molecular Weight	170kD
Cell Pathway	nucleus,cytoplasm,cytosol,plasma membrane,insulin receptor complex,caveola, intracellular membrane-bounded organelle,
Tissue Specificity	Epithelium,Eye,Skeletal muscle,
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

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],

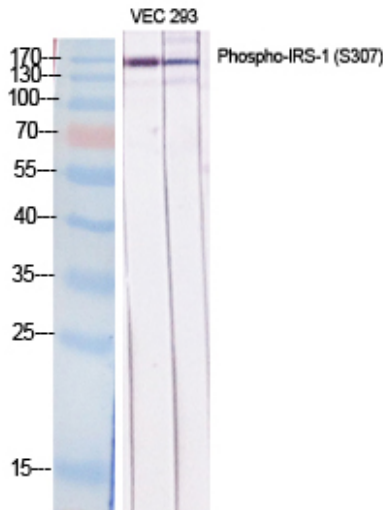
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

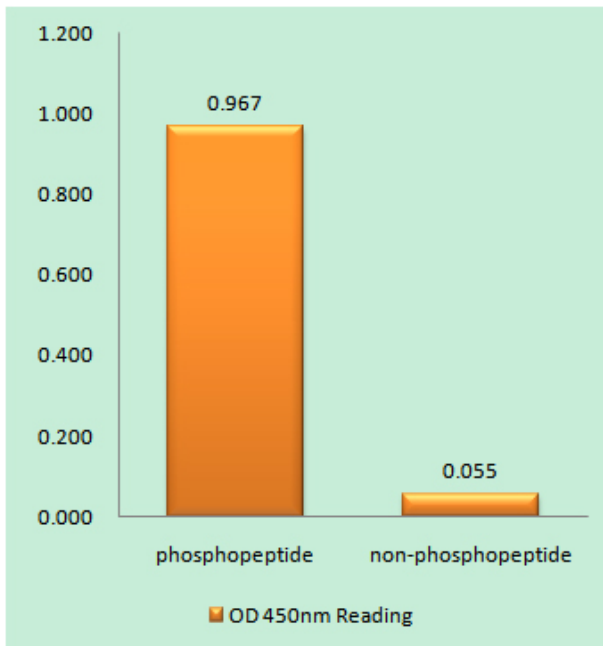
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images

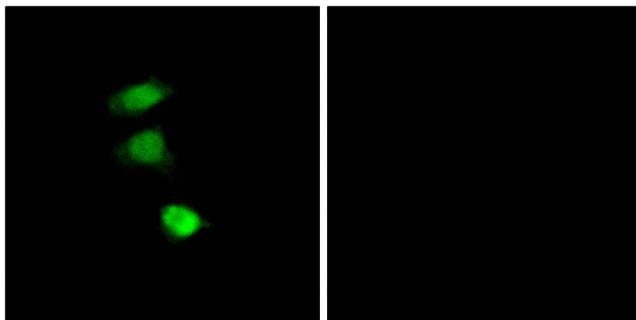


Western Blot analysis of various cells using Phospho-IRS-1 (S307) Polyclonal Antibody diluted at 1:1000

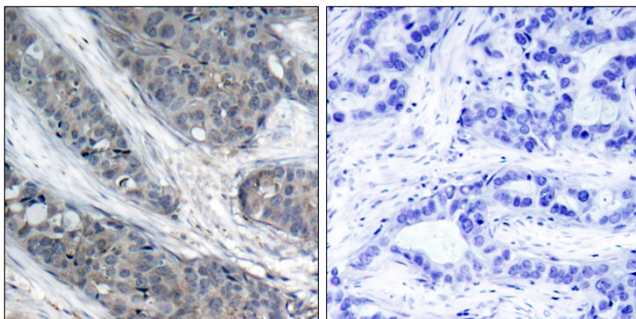
Western Blot analysis of VEC cells using Phospho-IRS-1 (S307) Polyclonal Antibody diluted at 1:1000



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 phosphopeptide.



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