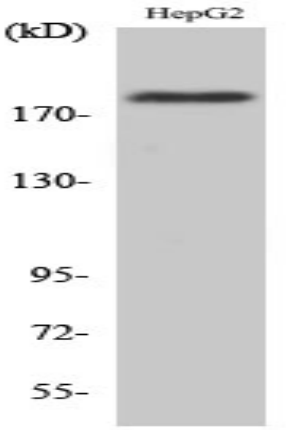
Best Tools for immunology Research

IRS-1 (phospho Ser1101) Polyclonal Antibody

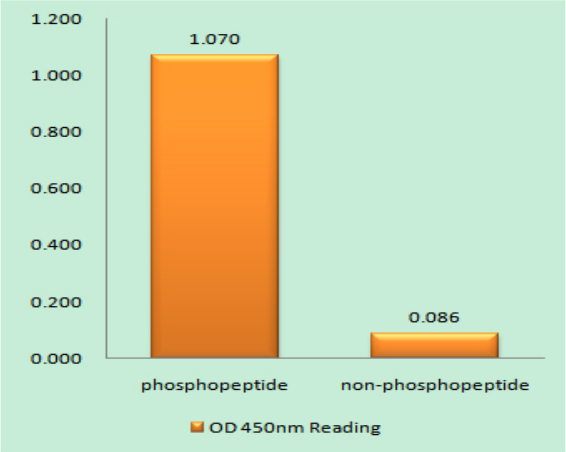
Catalog No :	YP0145
Reactivity :	Human;Mouse;Rat;Monkey
Applications :	WB;IHC;IF;ELISA
Target :	IRS-1
Fields :	>>cGMP-PKG signaling pathway;>>FoxO signaling pathway;>>Autophagy - animal;>>mTOR signaling pathway;>>PI3K-Akt signaling pathway;>>AMPK signaling pathway;>>Longevity regulating pathway;>>Longevity 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
Human Gene Id :	3667
Human Swiss Prot No :	P35568
Mouse Gene Id :	16367
Mouse Swiss Prot No :	P35569
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 Ser1101. AA range:1067-1116
Specificity :	Phospho-IRS-1 (S1101) Polyclonal Antibody detects endogenous levels of IRS-1 protein only when phosphorylated at S1101.

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. ELISA: 1:20000.. IF 1:50-200
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,

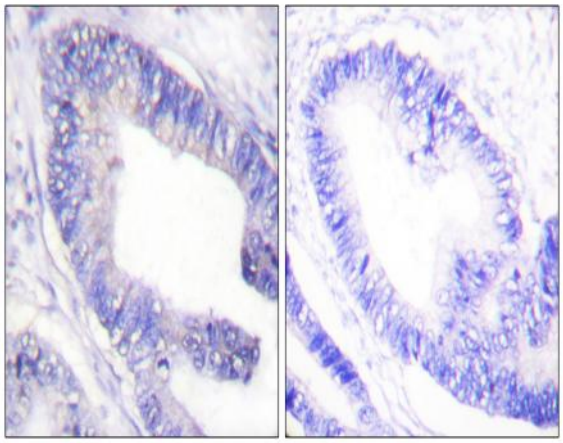
Products Images



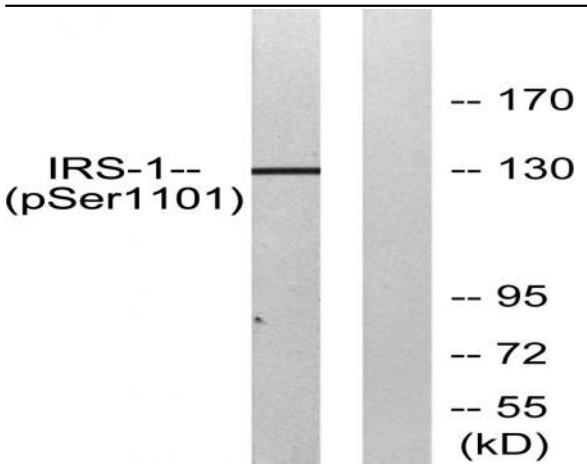
Western Blot analysis of various cells using Phospho-IRS-1 (S1101) Polyclonal Antibody diluted at 1:500



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using IRS-1 (Phospho-Ser1101) Antibody



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma, using IRS-1 (Phospho-Ser1101) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from COS7 cells treated with Calyculin A 50ng/ml 30', using IRS-1 (Phospho-Ser1101) Antibody. The lane on the right is blocked with the phospho peptide.