



# IRS-1 (phospho Ser312) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-03556
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC
<b>Gene Name</b>	IRS1
<b>Protein Name</b>	Insulin receptor substrate 1
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human IRS-1 around the phosphorylation site of Ser312. AA range:279-328
<b>Specificity</b>	Phospho-IRS-1 (S312) Polyclonal Antibody detects endogenous levels of IRS-1 protein only when phosphorylated at S312.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-2000;IHC-p 1:50-300
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	IRS1; Insulin receptor substrate 1; IRS-1
<b>Observed Band</b>	170kD
<b>Cell Pathway</b>	nucleus,cytoplasm,cytosol,plasma membrane,insulin receptor complex,caveola,intracellular membrane-bounded organelle,
<b>Tissue Specificity</b>	Epithelium,Eye,Skeletal muscle,
<b>Function</b>	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
<b>Background</b>	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],

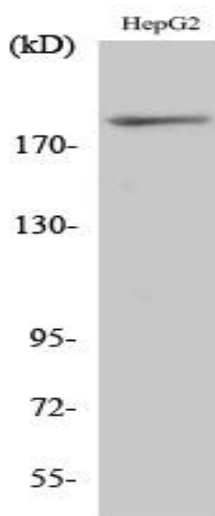
**matters needing attention**

Avoid repeated freezing and thawing!

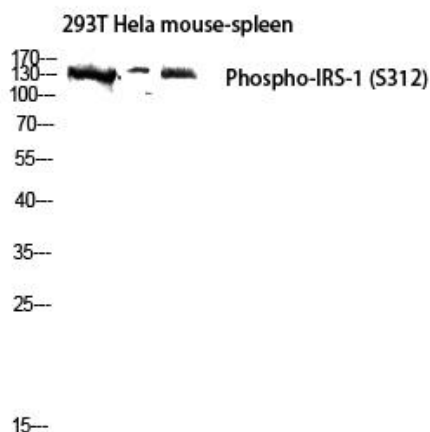
**Usage suggestions**

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

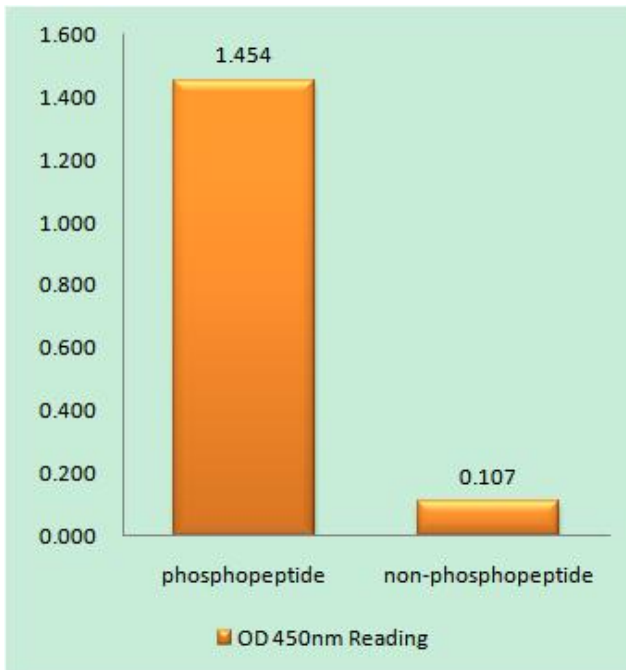
## Products Images



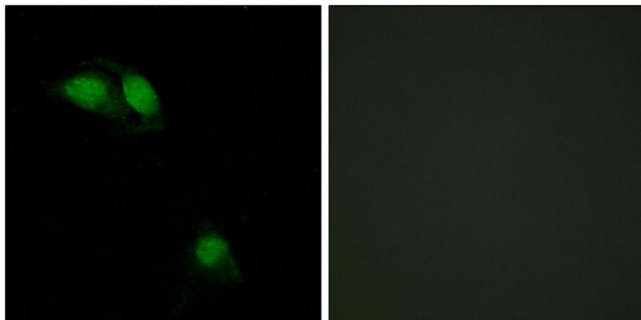
Western Blot analysis of various cells using Phospho-IRS-1 (S312) Polyclonal Antibody diluted at 1:1000



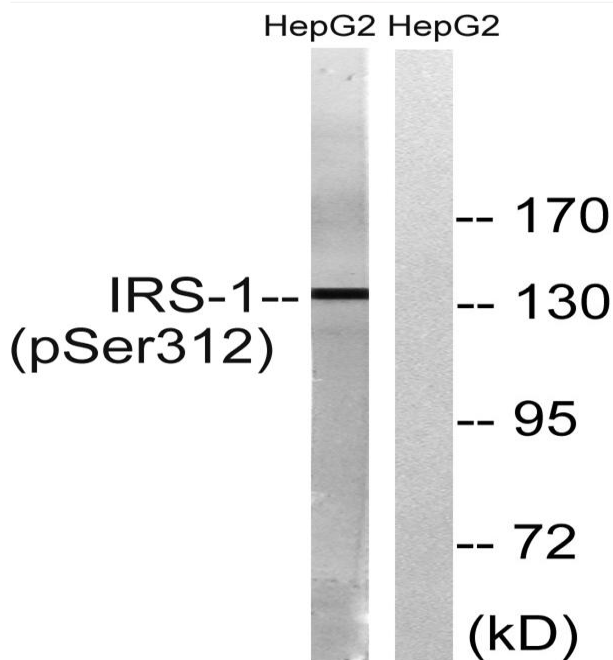
Western blot analysis of 293T Hela mouse-spleen lysis using Phospho-IRS-1 (S312) antibody. Antibody was diluted at 1:1000



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using IRS-1 (Phospho-Ser312) Antibody



Immunofluorescence analysis of HeLa cells, using IRS-1 (Phospho-Ser312) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HepG2 cells, using IRS-1 (Phospho-Ser312) Antibody. The lane on the right is blocked with the phospho peptide.