# IRS-1 (phospho Ser616) Polyclonal Antibody

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| **Catalog No** | BYab-03564 |
| **Isotype** | IgG |
| **Reactivity** | Human;Mouse;Rat |
| **Applications** | WB;IHC;IF;ELISA |
| **Gene Name** | IRS1 |
| **Protein Name** | Insulin receptor substrate 1 |
| **Immunogen** | The antiserum was produced against synthesized peptide derived from human IRS-1 around the phosphorylation site of Ser612. AA range:578-627 |
| **Specificity** | Phospho-IRS-1 (S616) Polyclonal Antibody detects endogenous levels of IRS-1 protein only when phosphorylated at S616. |
| **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** | WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200 |
| **Concentration** | 1 mg/ml |
| **Purity** | ≥90% |
| **Storage Stability** | -20°C/1 year |
| **Synonyms** | IRS1; Insulin receptor substrate 1; IRS-1 |
| **Observed Band** | 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 |

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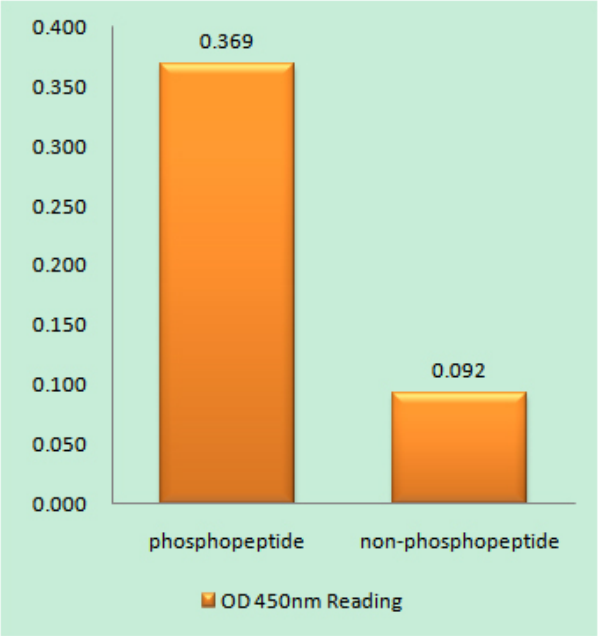
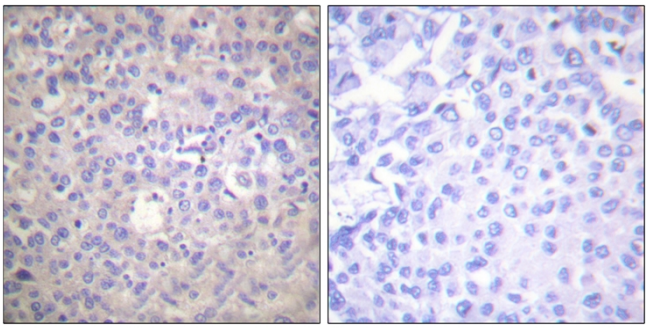
| | cardiovascular diseases associated with non-insulin-dependen |
| **Background** | This gene encodes a protein which is phosphorylated by insulin receptor tyrosine kinase. Mutations in this gene are associated with type II diabetes and susceptibility to insulin resistance. [provided by RefSeq, Nov 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. |

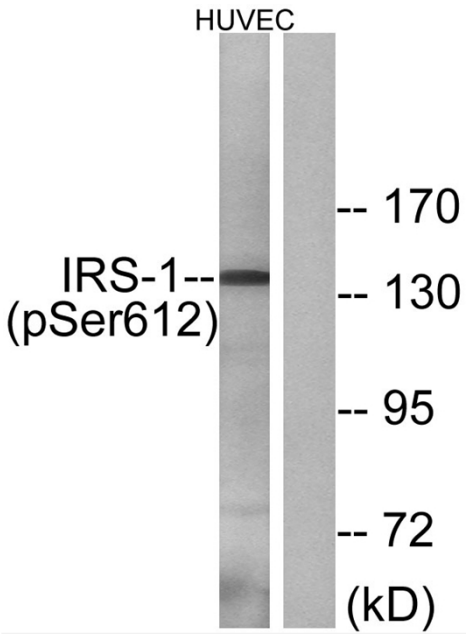
## Products Images




Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using IRS-1 (Phospho-Ser612) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using IRS-1 (Phospho-Ser612) Antibody. The picture on the right is blocked with the phospho peptide.




Western blot analysis of lysates from HUVEC cells treated with insulin 0.01U/ml 30', using IRS-1 (Phospho-Ser612) Antibody. The lane on the right is blocked with the phospho peptide.