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# IRS-1 (phospho Ser323) Polyclonal Antibody

Catalog # AP67813

## Product Information

| | |
|---|---|
| **Application** | WB, IHC-P, IF, ICC, E |
| **Primary Accession** | P35568 |
| **Reactivity** | Human, Mouse, Rat, Monkey |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 131591 |

## Additional Information

| | |
|---|---|
| **Gene ID** | 3667 |
| **Other Names** | IRS1; Insulin receptor substrate 1; IRS-1 |
| **Dilution** | WB~~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. IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A |
| **Format** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide. |
| **Storage Conditions** | -20℃ |

## Protein Information

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|---|---|
| **Name** | IRS1 |
| **Function** | Signaling adapter protein that participates in the signal transduction from two prominent receptor tyrosine kinases, insulin receptor/INSR and insulin-like growth factor I receptor/IGF1R (PubMed:7541045, PubMed:33991522, PubMed:38625937). Plays therefore an important role in development, growth, glucose homeostasis as well as lipid metabolism (PubMed:19639489). Upon phosphorylation by the insulin receptor, functions as a signaling scaffold that propagates insulin action through binding to SH2 domain-containing proteins including the p85 regulatory subunit of PI3K, NCK1, NCK2, GRB2 or SHP2 (PubMed:11171109, PubMed:8265614). Recruitment of GRB2 leads to the activation of the guanine nucleotide exchange factor SOS1 which in turn triggers the Ras/Raf/MEK/MAPK signaling cascade (By similarity). Activation of the PI3K/AKT pathway is responsible for most of insulin metabolic effects in the cell, and the Ras/Raf/MEK/MAPK is involved in the regulation of gene expression and in cooperation with the PI3K pathway regulates cell growth and differentiation. Acts a positive regulator of the Wnt/beta-catenin signaling pathway through suppression of DVL2 autophagy-mediated degradation leading to cell proliferation |

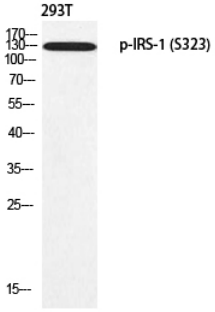
(PubMed:24616100).

**Cellular Location** Cytoplasm. Nucleus. Note=Nuclear or cytoplasmic localization of IRS1 correlates with the transition from proliferation to chondrogenic differentiation.

## Background

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 (By similarity).

## Images




Western blot analysis of 293T using p-IRS-1 (S323) antibody. Antibody was diluted at 1:1000

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.