

**IRS1 Antibody**  
**Rabbit mAb**  
**Catalog # AP90830****Specification**

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**IRS1 Antibody - Product Information**

Application	WB, IHC, ICC
Primary Accession	<a href="#">P35568</a>
Clonality	Monoclonal
<b>Other Names</b>	
HIRS1; Insulin receptor substrate 1; IRS 1; IRS1;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	131591 Da

**IRS1 Antibody - Additional Information**

Dilution	WB~~1:1000 IHC~~1:100~500 ICC~~N/A
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human IRS1
Description	IRS1 is one of the major substrates of the insulin receptor kinase. 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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

**IRS1 Antibody - Protein Information****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:<a href="http://www.uniprot.org/citations/7541045" target="\_blank">7541045</a>, PubMed:<a href="http://www.uniprot.org/citations/33991522" target="\_blank">33991522</a>, PubMed:<a href="http://www.uniprot.org/citations/38625937" target="\_blank">38625937</a>). Plays therefore an important role in development, growth, glucose homeostasis as well as lipid

metabolism (PubMed:<a href="http://www.uniprot.org/citations/19639489" target="\_blank">19639489</a>). 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:<a href="http://www.uniprot.org/citations/11171109" target="\_blank">11171109</a>, PubMed:<a href="http://www.uniprot.org/citations/8265614" target="\_blank">8265614</a>). 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:<a href="http://www.uniprot.org/citations/24616100" target="\_blank">24616100</a>).

### Cellular Location

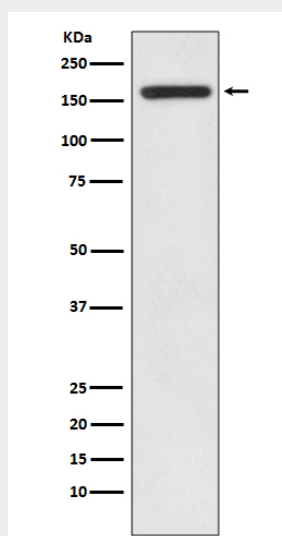
Cytoplasm. Nucleus. Note=Nuclear or cytoplasmic localization of IRS1 correlates with the transition from proliferation to chondrogenic differentiation.

### IRS1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### IRS1 Antibody - Images



Western blot analysis of IRS1 expression in HEK293 cell lysate.