

**Anti-IRS1 Rabbit Monoclonal Antibody**  
**Catalog # ABO13455****Specification**

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**Anti-IRS1 Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC, IF, ICC
Primary Accession	<a href="#">P35568</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-IRS1 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF applications. This antibody reacts with Human.

**Anti-IRS1 Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 3667

**Other Names**

Insulin receptor substrate 1, IRS-1, IRS1

**Calculated MW**

131591 MW KDa

**Application Details**

WB 1:1000-1:2000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human IRS1

**Purification**

Affinity-chromatography

**Storage**

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

**Anti-IRS1 Rabbit Monoclonal 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>).

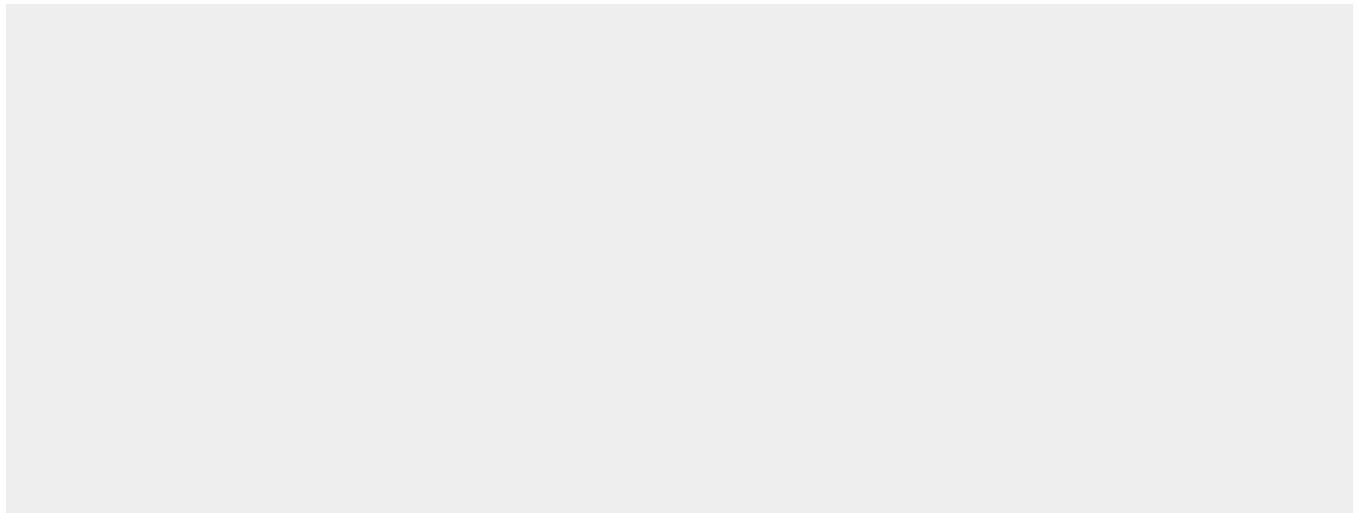
**Cellular Location**

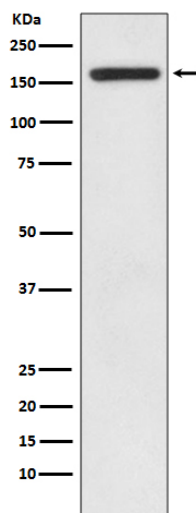
Cytoplasm. Nucleus. Note=Nuclear or cytoplasmic localization of IRS1 correlates with the transition from proliferation to chondrogenic differentiation.

**Anti-IRS1 Rabbit Monoclonal 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](#)

**Anti-IRS1 Rabbit Monoclonal Antibody - Images**



Western blot analysis of IRS1 expression in HEK293 cell lysate.