

**Anti-IRS2 Rabbit Monoclonal Antibody**  
**Catalog # ABO15242****Specification**

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**Anti-IRS2 Rabbit Monoclonal Antibody - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB, IHC, IF, ICC, FC   |
| Primary Accession | <a href="#">Q9Y4H2</a> |
| Host              | Rabbit                 |
| Isotype           | IgG                    |
| Reactivity        | Rat, Human, Mouse      |
| Clonality         | Monoclonal             |
| Format            | Liquid                 |

**Description**

Anti-IRS2 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications.  
This antibody reacts with Human, Mouse, Rat.

**Anti-IRS2 Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 8660

**Other Names**

Insulin receptor substrate 2, IRS-2, IRS2

**Calculated MW**

180 kDa KDa

**Application Details**

WB 1:500-1:2000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200<br>FC 1:100

**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 IRS2

**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-IRS2 Rabbit Monoclonal Antibody - Protein Information**

**Name** IRS2

### 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/25879670" target="\_blank">25879670</a>). Plays therefore an important role in development, growth, glucose homeostasis as well as lipid metabolism (PubMed:<a href="http://www.uniprot.org/citations/24616100" target="\_blank">24616100</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/15316008" target="\_blank">15316008</a>, PubMed:<a href="http://www.uniprot.org/citations/19109239" target="\_blank">19109239</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>). Plays a role in cell cycle progression by promoting a robust spindle assembly checkpoint (SAC) during M-phase (PubMed:<a href="http://www.uniprot.org/citations/32554797" target="\_blank">32554797</a>). In macrophages, IL4-induced tyrosine phosphorylation of IRS2 leads to the recruitment and activation of phosphoinositide 3-kinase (PI3K) (PubMed:<a href="http://www.uniprot.org/citations/19109239" target="\_blank">19109239</a>).

### Cellular Location

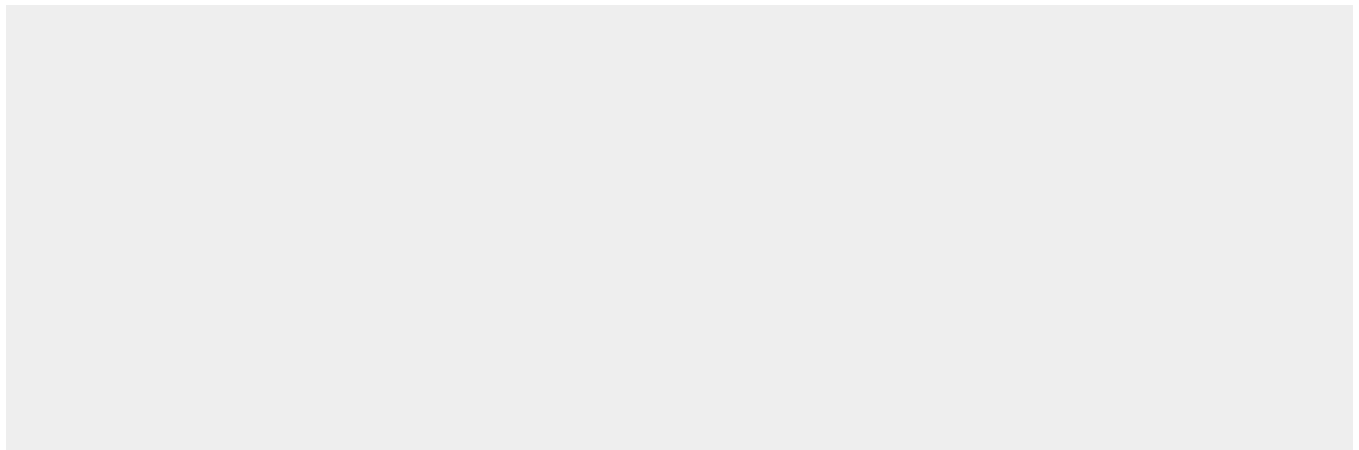
Cytoplasm, cytosol {ECO:0000250|UniProtKB:P81122}

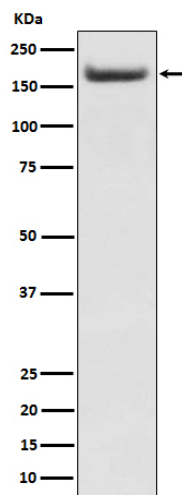
### Anti-IRS2 Rabbit Monoclonal Antibody - Protocols

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-IRS2 Rabbit Monoclonal Antibody - Images





Western blot analysis of IRS2 expression in HEK293 cell treated with insulin.