

**Anti-IRS2 Antibody**  
**Rabbit polyclonal antibody to IRS2**  
**Catalog # AP60877****Specification**

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**Anti-IRS2 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">O9Y4H2</a>
Other Accession	<a href="#">P81122</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	137334

**Anti-IRS2 Antibody - Additional Information****Gene ID** 8660**Other Names**

Insulin receptor substrate 2; IRS-2

**Target/Specificity**

Recognizes endogenous levels of IRS2 protein.

**Dilution**

WB~~WB (1/500 - 1/1000)

**Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

**Storage**

Store at -20 °C.Stable for 12 months from date of receipt

**Anti-IRS2 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/15316008" target="\_blank">15316008</a>).

<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**

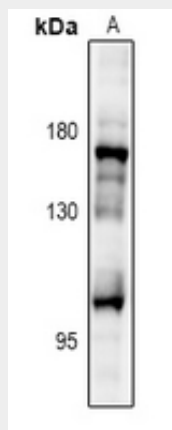
Cytoplasm, cytosol {ECO:0000250|UniProtKB:P81122}

#### **Anti-IRS2 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 Antibody - Images**



Western blot analysis of IRS2 expression in HEK293T (A) whole cell lysates.

#### **Anti-IRS2 Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human IRS2. The exact sequence is proprietary.