

IRS2 Antibody
Rabbit mAb
Catalog # AP91662**Specification**

IRS2 Antibody - Product Information

Application	WB, IHC, FC, ICC
Primary Accession	O9Y4H2
Reactivity	Rat
Clonality	Monoclonal
Other Names	
Insulin receptor substrate 2; IRS 2; IRS-2;	

Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	137334 Da

IRS2 Antibody - Additional Information

Dilution	WB~~1:1000 IHC~~1:100~500 FC~~1:10~50 ICC~~N/A
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human IRS2
Description	May mediate the control of various cellular processes by insulin.
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.

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:25879670). Plays therefore an important role in development, growth, glucose homeostasis as well as lipid metabolism (PubMed:24616100). 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:15316008, PubMed:19109239). 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). Plays a role in cell cycle progression by promoting a robust spindle assembly checkpoint (SAC) during M-phase (PubMed:32554797). In macrophages, IL4-induced tyrosine phosphorylation of IRS2 leads to the recruitment and activation of phosphoinositide 3-kinase (PI3K) (PubMed:19109239).

Cellular Location

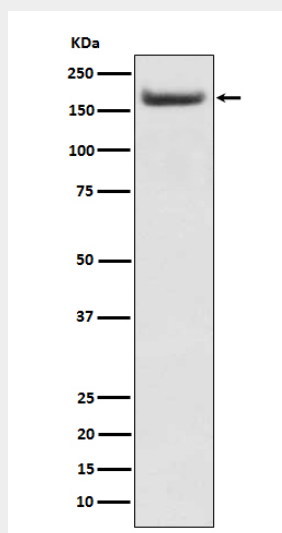
Cytoplasm, cytosol {ECO:0000250|UniProtKB:P81122}

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](#)

IRS2 Antibody - Images



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