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

Specification

Anti-IRS2 Antibody - Product Information

Application	**WB**
Primary Accession	Q9Y4H2
Other Accession	P81122
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: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:<a

href="http://www.uniprot.org/citations/19109239" target="_blank">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).

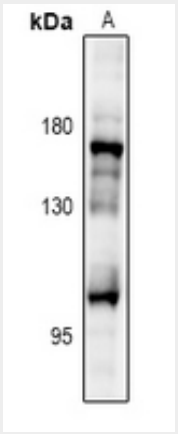
Cellular Location
Cytoplasm, cytosol {ECO:0000250|UniProtKB:P81122}

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 Cytomety
- 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.