

IRS2 Polyclonal Antibody

Catalog # AP74019

Specification

IRS2 Polyclonal Antibody - Product Information

Application WB
Primary Accession O9Y4H2
Reactivity Human
Host Rabbit
Clonality Polyclonal

IRS2 Polyclonal Antibody - Additional Information

Gene ID 8660

Other Names IRS2

Dilution

WB~~WB 1:500-2000, ELISA 1:10000-20000

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions -20°C

IRS2 Polyclonal 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 quanine 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

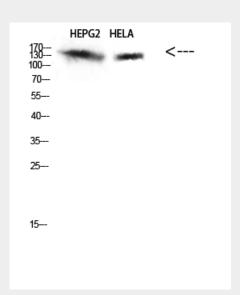
Cytoplasm, cytosol {ECO:0000250|UniProtKB:P81122}

IRS2 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IRS2 Polyclonal Antibody - Images



Western Blot analysis of HEPG2, HELA cells using Antibody diluted at 500. Secondary antibody was diluted at 1:20000

IRS2 Polyclonal Antibody - Background

May mediate the control of various cellular processes by insulin.