

IRS1 (17G5) Rabbit Monoclonal Antibody IRS1 (17G5) Rabbit Monoclonal Antibody Catalog # AP93676

Specification

IRS1 (17G5) Rabbit Monoclonal Antibody - Product Information

Application WB, IHC, IF, ICC
Primary Accession P35568
Reactivity Human
Clonality Monoclonal
Calculated MW 131591

IRS1 (17G5) Rabbit Monoclonal Antibody - Additional Information

IRS1 (17G5) Rabbit Monoclonal Antibody - Protein Information

Gene ID 3667

Other Names

Insulin receptor substrate 1, IRS-1, IRS1

Dilution

WB~~1:1000 IHC~~1:100~500 IF~~1:50~200 ICC~~N/A

Storage Conditions -20°C

Name IRS1

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:7541045, PubMed:33991522, PubMed:38625937). Plays therefore an important role in development, growth, glucose homeostasis as well as lipid metabolism (PubMed:19639489). 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:11171109, PubMed:8265614). 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).

Cellular Location

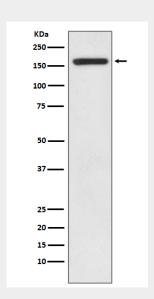
Cytoplasm. Nucleus. Note=Nuclear or cytoplasmic localization of IRS1 correlates with the transition from proliferation to chondrogenic differentiation.

IRS1 (17G5) Rabbit Monoclonal 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
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

IRS1 (17G5) Rabbit Monoclonal Antibody - Images



Western blot analysis of IRS1 expression in HEK293 cell lysate.