

IRS-3 (R-190): sc-28831

BACKGROUND

Insulin receptor substrate (IRS) proteins play important roles in insulin action and pancreatic β cell function. IRS-3, identified only in rodents, shows robust and prolonged tyrosine phosphorylation upon insulin treatment of cells and may play a role in delayed and prolonged insulin actions. IRS-3 interacts with phosphatidylinositol-3-kinase in adipocytes and hepatoma cells and contains pleckstrin and phosphotyrosine binding domains which are highly homologous to domains in IRS-1 and IRS-2. IRS-3 exhibits an expression pattern which differs from other IRS proteins. During both the embryonic development and adult life of the mouse, p53 inhibits the IRS-3 promoter, while tumor-derived p53 mutants de-repress the same promoter. GFP-IRS-3 fusion protein and endogenous rat IRS-3 localize in both the plasma membrane and the nucleus, indicating that intracellular localization of IRS-3 is determined by a different mechanism from other IRS proteins.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: IRS3L (human) mapping to 7q22.1; Irs3 (mouse) mapping to 5 G2.

SOURCE

IRS-3 (R-190) is a rabbit polyclonal antibody raised against amino acids 305-494 mapping at the C-terminus of IRS-3 of rat origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

IRS-3 (R-190) is recommended for detection of IRS-3 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1–2 μ g per 100–500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for IRS-3 siRNA (m): sc-40974.

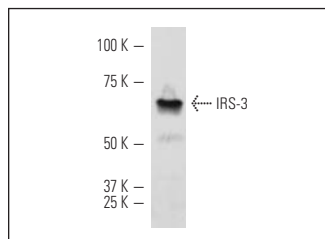
Molecular Weight of IRS-3: 60 kDa.

Positive Controls: rat pancreas extract.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/ 2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



IRS-3 (R-190): sc-28831. Western blot analysis of IRS-3 expression in rat pancreas tissue extract.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.