

IRS-3 (R-20): sc-8186

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 derepress 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: *Irs3* (mouse) mapping to 5 G2.

SOURCE

IRS-3 (R-20) is an affinity purified goat polyclonal antibody raised against a peptide 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.

Blocking peptide available for competition studies, sc-8186 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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-20) 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), 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, IRS-3 shRNA Plasmid (m): sc-40974-SH and IRS-3 shRNA (m) Lentiviral Particles: sc-40974-V.

Molecular Weight of IRS-3: 60 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.