**BACKGROUND**

The Insulin receptor (insulin R) is a heterodimeric protein complex that has an intracellular β subunit and an extracellular α subunit, which is disulfide-linked to a transmembrane segment. The Insulin ligand binds to Insulin R and initiates molecular signaling pathways that promote glucose uptake in cells and, ultimately, glycogen synthesis. Insulin binding to Insulin R induces phosphorylation of intracellular tyrosine kinase domains and recruitment of multiple SH2 and SH3 domain-containing intracellular proteins that serve as signaling intermediates for the pleiotropic effects of Insulin. The human Insulin R gene encodes a 1,382 amino acid protein that cleaves apart to form α and β subunits. Human Insulin R may be phosphorylated on specific amino acid residues, such as Tyr 1322.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: INSR (human) mapping to 19p13.2; Insr (mouse) mapping to 8 A1.1.

**SOURCE**

p-insulin Rβ (10C3) is a mouse monoclonal antibody raised against phosphopeptide corresponding to amino acid residues surrounding Tyrosine 1150/1151 of Insulin R of human origin.

**PRODUCT**

Each vial contains 50 µg IgG1 in 0.5 ml of PBS with < 0.1% sodium azide, 0.1% gelatin, PEG and sucrose.

**APPLICATIONS**

p-insulin Rβ (10C3) is recommended for detection of Tyr 1150 and Tyr 1151 dually phosphorylated Insulin Rβ and IGFl receptor of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)).

Molecular Weight of p-insulin R precursor: 200 kDa.

Molecular Weight of mature p-insulin Rβ chain: 95 kDa.

**RESEARCH USE**

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

**STORAGE**

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

**DATA**

![Western Blot Analysis](image)

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

See our website at www.scbt.com for detailed protocols and support products.