**Product Type:** Recombinant rabbit monoclonal IgG, primary antibodies

**Species Reactivity:** Human, Mouse, Rat

**Applications:** WB, ICC/IF

**Molecular Wt.:** 95 kDa

**Description:** The insulin receptor (IR) 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 the IR and initiates molecular signaling pathways that promote glucose uptake in cells and glycogen synthesis. Insulin binding to IR induces phosphorylation of intracellular tyrosine kinase domains and recruitment of multiple SH2 and SH3 domain-containing intracellular proteins that serve as signaling intermediates for pleiotropic effects of insulin. The human insulin receptor gene maps to chromosome 19p13.3-p13.2 and encodes a 1382 amino acid protein that cleaves to form α and β subunits. Type 1 diabetes is an autoimmune condition of the endocrine pancreas that results in destruction of insulin secreting cells and a progressive loss in insulin-sensitive glucose uptake by cells. Type 2 diabetes is a condition where cells become resistant to insulin action.

**Immunogen:** Recombinant protein.

**Positive control:** 293, MCF-7, Hela, HepG2, LO2, RH-35, PANC-1.

**Subcellular location:** Cell membrane.

**Database links:**
- SwissProt: P06213 (Human) P15208 (Mouse) P15127 (Rat)

**Recommended Dilutions:**
- WB: 1:1,000–1:2,000
- ICC: 1:100–1:500

**Storage Buffer:**
1×TBS (pH7.4), 1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

**Storage Instruction:**
Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

**Purity:**
ProA affinity purified.

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**Fig1:** Western blot analysis of Insulin Receptor on different lysates using anti-Insulin Receptor antibody at 1/1,000 dilution.

**Positive control:**
- Lane 1: 293
- Lane 2: MCF-7
- Lane 3: Hela

**Fig2:** ICC staining Insulin Receptor in HepG2 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

**Fig3:** ICC staining Insulin Receptor in LO2 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
Background References
