
Insulin receptor subunit beta Rabbit pAb

Catalog Number: bs-4995R

Target Protein: Insulin receptor subunit beta

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: WB (1:500-2000), IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500), Flow-Cyt (0.2µg/Test), ICC/IF (1:100)

Reactivity: Human (predicted:Mouse, Rat)

Predicted MW: 68/152 kDa

Entrez Gene: 3643

Swiss Prot: P06213

Source: KLH conjugated synthetic peptide derived from human Insulin receptor subunit beta: 801-900/1382.

Purification: affinity purified by Protein A

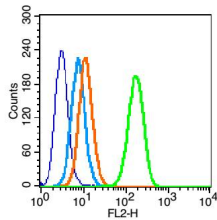
Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

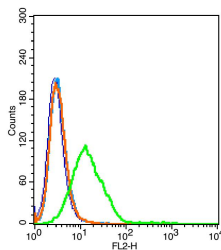
Background: The human insulin receptor is a heterotetrameric membrane glycoprotein consisting of disulfide linked subunits in a beta-alpha-alpha-beta configuration. The beta subunit (95 kDa) possesses a single transmembrane domain, whereas the alpha subunit (135 kDa) is completely extracellular. The insulin receptor exhibits receptor tyrosine kinase (RTK) activity. RTKs are single pass transmembrane receptors that possess intrinsic cytoplasmic enzymatic activity, catalyzing the transfer of the gamma phosphate of ATP to tyrosine residues in protein substrates. RTKs are essential components of signal transduction pathways that affect cell proliferation, differentiation, migration and metabolism. Included in this large protein family are the insulin receptor and the receptors for growth factors such as epidermal growth factor, fibroblast growth factor and vascular endothelial growth factor. Receptor activation occurs through ligand binding, which facilitates receptor dimerization and autophosphorylation of specific tyrosine residues in the cytoplasmic portion. The interaction of insulin with the alpha subunit of the insulin receptor activates the protein tyrosine kinase of the beta subunit, which then undergoes an autophosphorylation that increases its tyrosine kinase activity. Three adapter proteins,

IRS1, IRS2 and Shc, become phosphorylated on tyrosine residues following insulin receptor activation. These three phosphorylated proteins then interact with SH2 domain containing signaling proteins.

VALIDATION IMAGES



Blank control (blue line): HL60(fixed with 70% ethanol Overnight at 4°C). Primary Antibody (green line): Rabbit Anti-Insulin receptor subunit beta antibody (bs-4995R), Dilution: 0.2µg /10⁶ cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE, Dilution: 1µg /test.



Blank control: RSC96(blue). Primary Antibody: Rabbit Anti-Insulin receptor subunit beta antibody(bs-4995R), Dilution: 5µg in 100 1µL 1X PBS containing 0.5% BSA; Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions); Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.

PRODUCT SPECIFIC PUBLICATIONS

[IF=2.369] Martinez-Rachadell L et al. Cell-specific expression of insulin/insulin-like growth factor-I receptor hybrids in the mouse brain. Growth Horm. IGF Res. 2019 Feb 22;45 IHC ; Mouse . 30825797