bs-5453R **[Primary Antibody]**

phospho-Insulin Receptor Beta (Tyr1185) Rabbit pAb

www.bioss.com.cn
sales@bioss.com.cn
techsupport@bioss.com.cn
400-901-9800

DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 3643 **SWISS:** P06213

Target: Insulin Receptor Beta (Tyr1185)

Immunogen: KLH conjugated Synthesised phosphopeptide derived from human Insulin Receptor Beta around the phosphorylation site of Tyr1185: DI(p-Y)ET.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

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.

Applications: **ELISA** (1:5000-10000)

Reactivity: Human (predicted: Mouse, Rat, Rabbit, Pig, Cow, Chicken, Dog)

Predicted MW.: 68/152 kDa

Subcellular Location: Cell membrane

SELECTED CITATIONS

- **[IF=4.122]** Lochhead JJ et al. Distribution of insulin in trigeminal nerve and brain after intranasal administration. Sci Rep. 2019 Feb 22;9(1):2621. WB ;Rat. 30796294
- **[IF=3.42]** Tsuchiya, A., T. Kanno, and T. Nishizaki. "Stearic Acid Serves as a Potent Inhibitor of Protein Tyrosine Phosphatase 1B." Cellular Physiology and Biochemistry 32.5 (2013): 1451-1459. WB ;="Mouse". 24296476
- **[IF=2.57]** Tsuchiya et al. Oleic acid stimulates glucose uptake into adipocytes by enhancing insulin receptor signaling. (2014) J.Pharmacol.Sci. 126:337-43 WB ;Mouse. 25391857