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## phospho-IGF1R (Tyr980) Rabbit pAb

Catalog Number: bs-5447R

Target Protein: phospho-IGF1R (Tyr980)

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

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

Reactivity: Human, Mouse (predicted:Rat)

Predicted MW: 150 kDa

Entrez Gene: 3480

Swiss Prot: P08069

Source: KLH conjugated Synthesised phosphopeptide derived from human IGF1R around the phosphorylation site of Tyr980: PE(p-Y)FS.

Purification: affinity purified by Protein A

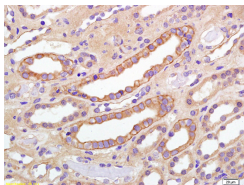
Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

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

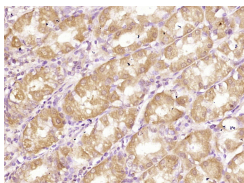
**Background:** This receptor binds insulin-like growth factor 1 (IGF1) with a high affinity and IGF2 with a lower affinity. It has a tyrosine-protein kinase activity, which is necessary for the activation of the IGF1-stimulated downstream signaling cascade. When present in a hybrid receptor with INSR, binds IGF1. PubMed:12138094 shows that hybrid receptors composed of IGF1R and INSR isoform Long are activated with a high affinity by IGF1, with low affinity by IGF2 and not significantly activated by insulin, and that hybrid receptors composed of IGF1R and INSR isoform Short are activated by IGF1, IGF2 and insulin. In contrast, PubMed:16831875 shows that hybrid receptors composed of IGF1R and INSR isoform Long and hybrid receptors composed of IGF1R and INSR isoform Short have similar binding characteristics, both bind IGF1 and have a low affinity for insulin.

### VALIDATION IMAGES

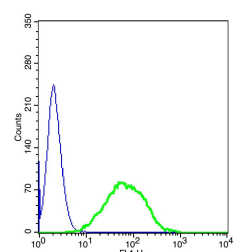
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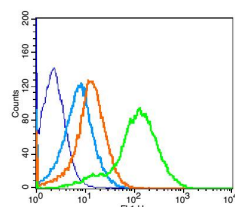
Tissue/cell: human kidney carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Incubation: Anti-phospho-IGF1R(Tyr980) Polyclonal Antibody, Unconjugated(bs-5447R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



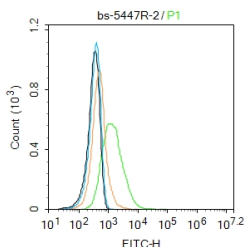
Paraformaldehyde-fixed, paraffin embedded (human stomach); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (RELM beta) Polyclonal Antibody, Unconjugated (bs-5774R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



The blue histogram is unstained cells(Hepg2 cells). The green histogram is cells stained with Rabbit Anti-phospho-IGF1R (Tyr980) antibody (bs-5447R) plus secondary antibody (bs-0295G-FITC). Concentration 1:20



Blank control(blue): Mouse Kidney (fixed with 2% paraformaldehyde for 10 min at 37°C). Primary Antibody: Rabbit Anti-phospho-IGF1R (Tyr980) antibody (bs-5447R, Green); Dilution: 1µg in 100 µL 1X PBS containing 0.5% BSA; Isotype Control Antibody: Rabbit IgG (orange), used under the same conditions; Secondary Antibody: Goat anti-rabbit IgG-FITC (white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.



Blank control: MCF7. Primary Antibody (green line): Rabbit Anti-phospho-IGF1R (Tyr980) antibody (bs-5447R) Dilution: 2µg /10<sup>6</sup> cells; Isotype Control Antibody (orange line): Rabbit IgG. Secondary Antibody : Goat anti-rabbit IgG-FITC Dilution: 1µg /test. Protocol The cells were incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

## PRODUCT SPECIFIC PUBLICATIONS

[IF=17.4] Zhiyuan Wang, et al. IGF1c mimetic peptide-based supramolecular hydrogel microspheres synergize with neural stem cells to promote functional recovery from spinal cord injury. NANO TODAY. 2023 Aug;51:101894 ICC ; Rat . 10.1016/j.nantod.2023.101894

[IF=6.2] Tang, Hexiao, et al. "Estrogen and insulin-like growth factor 1 synergistically promote the development of lung adenocarcinoma in mice." International Journal of Cancer (2013).. WB ; ="Mouse" . 23649836

[IF=4.77] Lee, Yongik, et al. "Inhibition of IGF1R signaling abrogates resistance to afatinib (BIBW2992) in EGFR T790M mutant lung cancer cells." Molecular Carcinogenesis (2015). WB ; ="Human" . 26052929