bs-2736R **[Primary Antibody]**

phospho-IRS1 (Ser307) Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 3667 **SWISS:** P35568

Target: phospho-IRS1 (Ser307)

Immunogen: KLH conjugated Synthesised phosphopeptide derived from human IRS1 around the phosphorylation site of Ser307: TE(p-S)IT.

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: Insulin receptor substrates (IRS) are responsible for several insulin related activities, such as glucose homeostasis, cell growth, cell transformation, apoptosis and insulin signal transduction. Serine/threonine phosphorylation of IRS1 has been demonstrated to be a negative regulator of insulin signaling and is responsible for its degradation, although IRS1 degradation pathways are not well understood. IRS1 has also been shown to be constitutively activated in cancers such as breast cancer, Wilm's tumors, and adrenal cortical carcinomas, thus making IRS1 phosphorylation and subsequent degradation an attractive therapeutic target. To date there have been four subtypes identified: IRS1, 2, 3 and 4, with IRS1 being widely expressed.

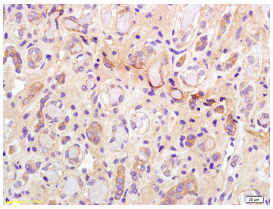
Applications: **IHC-P** (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (1μg /test)

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

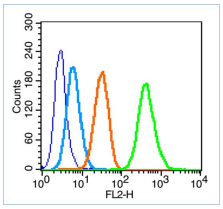
Predicted MW.: 132 kDa

Subcellular Location: Cell membrane ,Cytoplasm ,Nucleus

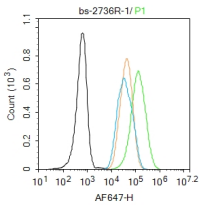
VALIDATION IMAGES



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-IRS-1(Ser307) Polyclonal Antibody, Unconjugated(bs-2736R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control (blue line): Hela (fixed with 70% ethanol (Overnight at 4°C) and then permeabilized with 0.1% PBS-Tween for 20 min at room temperature). Primary Antibody (green line): Rabbit Anti-phospho-IRS1 (Ser307) antibody (bs-2736R) Dilution: 1μg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE Dilution: 1μg /test.



Blank control: HepG2. Primary Antibody (green line): Rabbit Anti-phospho-IRS1 (Ser307) antibody (bs-2736R) Dilution: 1μg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-AF647 Dilution: 1μg /test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20°C. The cells were then 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.

SELECTED CITATIONS

- **[IF=6.691]** Wang, Hongyan. et al. Protection of pancreatic β-cell by phosphocreatine through mitochondrial

improvement via the regulation of dual AKT/IRS-1/GSK-3β and STAT3/Cyp-D signaling pathways. 2021 Aug 28 WB ;Rat. 34455488

- **[IF=3.098]** Zhang et al. Astragalus Polysaccharide Improves Insulin Sensitivity via AMPK Activation in 3T3-L1 Adipocytes. (2018) Molecules. 23 WB ;Mouse. 30347867
- **[IF=2.47]** Luo, Cheng, et al. "Kaempferol alleviates insulin resistance via hepatic IKK/NF-κB signal in type 2 diabetic rats." International Immunopharmacology 28.1 (2015): 744-750. WB ;="Rat". 26263168
- **[IF=1.58]** Gao, Sujie, et al. "Propofol inhibits growth of neurons through regulating insulin receptor and insulin-like growth factor-1 receptor." Int J Clin Exp Pathol 9.7 (2016): 6785-6794. WB ;="Rat". ISSN:1936-2625/IJCEP0023819
- **[IF=1.832]** Zhang T et al. Dietary Sea Buckthorn Pomace Induces Beige Adipocyte Formation in Inguinal White Adipose Tissue in Lambs. Animals (Basel). 2019 Apr 24;9(4). pii: E193. WB ;ram lambs. 31022943