bs-9079R **[Primary Antibody]**

RGC32/C13orf15 Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 28984 **SWISS:** Q9H4X1

Target: RGC32/C13orf15

Immunogen: KLH conjugated synthetic peptide derived from human RGC32: 65-137/137.

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: RGC32, also known as C13orf15, is a 137 amino acid protein that localizes to the cytoplasm, as well as to the nucleus and the centrosome. Expressed at high levels in kidney, pancreas and skeletal muscle and at lower levels in brain, heart and placenta, RGC32 functions to modulate the activity of cell cycle-specific kinases, thereby regulating cell cycle progression. Additionally, RGC32 may promote cell cycle arrest at the G2/M phase transition and is thought to inhibit the growth of glioma cells, possibly functioning as a tumor suppressor. Conversely, overexpression of RGC32 may promote cell replication and assist in the pathogenesis of malignancies, suggesting that RGC32 also participates in tumor transformation and progression. RGC32 activity is induced by complement activation and by p53 in response to DNA damage. Multiple isoforms of RGC32 exist as a result of alternative splicing events.

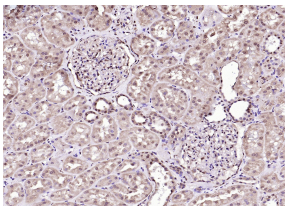
Applications: **IHC-P** (1:100-500)
IHC-F (1:100-500)
IF (1:50-200)
Flow-Cyt (1ug/test)

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

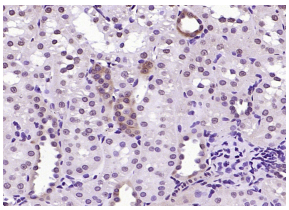
Predicted MW.: 15 kDa

Subcellular Location: Cytoplasm ,Nucleus

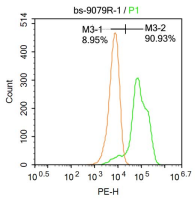
VALIDATION IMAGES



Paraformaldehyde-fixed, paraffin embedded (Human kidney); 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 (RGC32) Polyclonal Antibody, Unconjugated (bs-9079R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat kidney); 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 (RGC32) Polyclonal Antibody, Unconjugated (bs-9079R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Blank control:Molt-4. Primary Antibody (green line): Rabbit Anti-C13orf15 antibody (bs-9079R) 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 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=12.7]** Zhang Xinshu. et al. Multi-omics analysis of human tendon adhesion reveals that ACKR1-regulated macrophage migration is involved in regeneration. BONE RES. 2024 May;12(1):1-17 IF ;Human. 38714649
- **[IF=3.969]** Sonia I. Vlaicu. et al. RGC-32′ dual role in smooth muscle cells and atherogenesis. CLIN IMMUNOL. 2022 May;238:109020 IHC ;Human. 35462050
- **[IF=3.973]** Nian-jie Zhang. et al. Nonylphenol Promoted Epithelial–Mesenchymal Transition in Colorectal Cancer Cells by Upregulating the Expression of Regulator of Cell Cycle. CHEM RES TOXICOL. 2022;35(9):1533–1540 IHC ;Human. 36074022
- **[IF=2.64]** Vlaicu, Sonia I., et al. "RGC-32 is expressed in the human atherosclerotic arterial wall: Role in C5b-9-induced cell proliferation and migration."Experimental and Molecular Pathology 101.2 (2016): 221-230. IHC ;="Human". 27619159
- **[IF=2.487]** Tatomir A et al. RGC-32 regulates reactive astrocytosis and extracellular matrix deposition in experimental autoimmune encephalomyelitis.Immunol Res. 2018 Jul 13. IHC,WB ;Human&Rat. 30006805