

# Rabbit Anti-RGC32/C13orf15 antibody

## SL9079R

Product Name:	RGC32/C13orf15
Chinese Name:	补体应答基因32抗体
Alias:	RGC32; Chromosome 13 open reading frame 15; KIAA0564; MGC87338; response gene to complement 32; Response gene to complement 32 protein; RGC 32; RGCC HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit, Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1ug/testIF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	15kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human RGC32:65-137/137
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 癈 for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20癈. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 癈.
PubMed:	<u>PubMed</u>
Product Detail:	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.

#### **Function:**

Modulates the activity of cell cycle-specific kinases. Enhances CDK1 activity. May contribute to the regulation of the cell cycle. May inhibit growth of glioma cells by promoting arrest of mitotic progression at the G2/M transition. Fibrogenic factor contributing to the pathogenesis of renal fibrosis through fibroblast activation.

#### **Subunit:**

Interacts with SMAD3. Interacts with CDK1 and PLK1.

#### **Subcellular Location:**

Cytoplasm. Nucleus. Cytoplasm ?cytoskeleton ?centrosome. Note: Cytoplasmic in unstimulated cells. Nuclear after activation by complement. Associated with the centrosome during prometaphase and metaphase.

### Tissue Specificity:

Detected in brain, heart and liver (at protein level). Highly expressed in liver, skeletal muscle, kidney and pancreas. Detected at lower levels in heart, brain and placenta. Detected in aorta endothelial cells. Overexpressed in colon, breast, prostate, bladder, lung, and ovarian cancer tissues.

SWISS: O9H4X1

**Gene ID:** 28984

#### Database links:

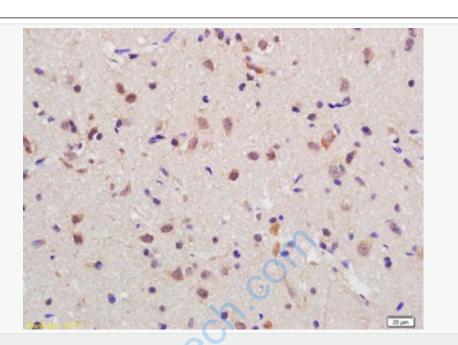
Entrez Gene: 28984 Human

Omim: 610077 Human

SwissProt: Q9H4X1 Human

#### **Important Note:**

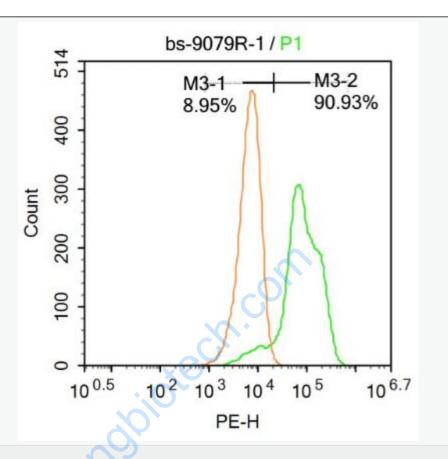
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## Picture:

Tissue/cell: rat brain tissue; 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-C13orf15 Polyclonal Antibody, Unconjugated(SL9079R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control:Molt-4.

Primary Antibody (green line): Rabbit Anti-C13orf15 antibody (SL9079R)

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.

