10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# RGC32 Rabbit pAb

Catalog # AP97483

## Product Information

| | |
|---|---|
| **Application** | IHC-P, IHC-F, IF |
| **Primary Accession** | Q9H4X1 |
| **Other Accession** | Q9H4X1 |
| **Reactivity** | Rat |
| **Predicted** | Human, Mouse |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 14559 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human RGC32 |
| **Epitope Specificity** | 51-137/137 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SUBUNIT** | Interacts with SMAD3. Interacts with CDK1 and PLK1. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | 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. |

## Additional Information

| | |
|---|---|
| **Gene ID** | 28984 |
| **Other Names** | C13orf15; RGC-32; RGC32; bA157L14.2; RGCC_HUMAN; RGCC; Response gene to complement 32 protein (RGC-32); regulator of cell cycle; chromosome 13 open reading frame 15; response gene to complement 32 |
| **Dilution** | IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 |
| **Storage** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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 °C.

## Protein Information

| | |
|---|---|
| **Name** | RGCC |
| **Synonyms** | C13orf15, RGC32 |
| **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. |
| **Cellular Location** | Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Note=Cytoplasmic in unstimulated cells. Nuclear after activation by complement. Associated with the centrosome during prometaphase and metaphase |
| **Tissue Location** | 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 |

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.