

# GC1q R Rabbit mAb [241Y]

Cat NO. :A75099

### Information:

| Applications  | Reactivity: | UniProt ID: | MW(kDa) | Host   | Isotype | Size        |
|---------------|-------------|-------------|---------|--------|---------|-------------|
| WB,IHC,ICC/IF | H,M,R       | Q07021      | 32 kDa  | Rabbit | IgG     | 100ul,200ul |

Applications detail:

| Application  | Dilution    |  |  |  |
|--|-------------|--|--|--|
| WB   | 1:1000-2000 |  |  |  |
| ІНС  | 1:100       |  |  |  |
| ICC/IF   | 1:100       |  |  |  |
| The optimal dilutions should be determined by the end user |             |  |  |  |

Conjugate:

UnConjugate

Form:

Liquid

sensitivity:

Endogenous

**Purification**:

Protein A purification

Specificity:

Antibody is produced by immunizing animals with a synthetic peptide at the sequence of human GC1q R

### Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at-20°C or -80°C.

Products are valid for one natural year of receipt. Avoid repeated freeze / thaw cycles.

# Tissue specificity:

Expressed on cell surface of peripheral blood cells (at protein level), Surface expression is reported for macrophages and monocyte-derived dendritic cells..

# Subcellular location:

Mitochondrion matrix. Nucleus. Nucleus, nucleolus. Cell membrane,Peripheral membrane protein,Extracellular side. Secreted. Cytoplasm.

# Function:

Introduction: WB: Western Blot IP: Immunoprecipitation IHC: Immunohistochemistry ChIP: Chromatin Immunoprecipitation ICC/IF: Immunocytochemistry/
Immunofluorescence F: Flow Cytometry

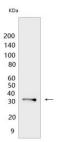
Cross Reactivity: H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus MI: mink C: chicken Dm D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Hr: horse



Is believed to be a multifunctional and multicompartmental protein involved in inflammation and infection processes, ribosome biogenesis, protein synthesis in mitochondria, regulation of apoptosis, transcriptional regulation and pre-mRNA splicing. At the cell surface is thought to act as an endothelial receptor for plasma proteins of the complement and kallikrein-kinin cascades. Putative receptor for C1q, specifically binds to the globular 'heads' of C1q thus inhibiting C1, may perform the receptor function through a complex with C1qR/CD93. In complex with cytokeratin-1/KRT1 is a high affinity receptor for kininogen-1/HMWK. Can also bind other plasma proteins, such as coagulation factor XII leading to its autoactivation. May function to bind initially fluid kininogen-1 to the cell membrane. The secreted form may enhance both extrinsic and intrinsic coagulation pathways. It is postulated that the cell surface form requires docking with transmembrane proteins for downstream signaling which might be specific for a cell-type or response. By acting as C1q receptor is involved in chemotaxis of immature dendritic cells and neutrophils and is proposed to signal through CD209/DC-SIGN on immature dendritic cells, through integrin alpha-4/beta-1 during trophoblast invasion of the decidua, and through integrin beta-1 during endothelial cell adhesion and spreading. Signaling involved in inhibition of innate immune response is implicating the PI3K-AKT/PKB pathway. Required for protein synthesis in mitochondria (PubMed:28942965). In mitochondrial translation may be involved in formation of functional 55S mitoribosomes, the function seems to involve its RNA-binding activity. May be involved in the nucleolar ribosome maturation process, the function may involve the exchange of FBL for RRP1 in the association with pre-ribosome particles. Involved in regulation of RNA splicing by inhibiting the RNA-binding capacity of SRSF1 and its phosphorylation. Is required for the nuclear translocation of splicing factor U2AF1L4. Involved in regulation of CDKN2A- and HRK-mediated apoptosis. Stabilizes mitochondrial CDKN2A isoform smARF. May be involved in regulation of FOXC1 transcriptional activity and NFY/CCAAT-binding factor complex-mediated transcription. May play a role in antibacterial defense as it can bind to cell surface hyaluronan and inhibit Streptococcus pneumoniae hyaluronate lyase. May be involved in modulation of the immune response, ligation by HCV core protein is resulting in suppression of interleukin-12 production in monocyte-derived dendritic cells. Involved in regulation of antiviral response by inhibiting DDX58and IFIH1-mediated signaling pathways probably involving its association with MAVS after viral infection.., (Microbial infection) Involved in HIV-1 replication, presumably by contributing to splicing of viral RNA.., (Microbial infection) In infection processes acts as an attachment site for microbial proteins, including Listeria monocytogenes

# **Validation Data:**

### GC1q R Rabbit mAb [241Y] Images



Western blot (SDS PAGE) analysis of extracts from HeLa cells. Using GC1q RRabbit mAb [241Y] at dilution of 1:1000 incubated at  $4^{\circ}$ C over night.

View more information on http://naturebios.com

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 1% w/v Milk, 1X TBST at 4°C overnight.