

## Product datasheet for AM26294FC-N

## OriGene Technologies, Inc.

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## GC1q R (C1QBP) (76-93) Mouse Monoclonal Antibody [Clone ID: 60.11]

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: 60.11

**Applications:** ELISA, FN, IP, WB

**Recommended Dilution:** Flow cytometry: The typical starting working dilution is 1:50.

Functional assays. Immunoassays. Immunoprecipitation.

Western blot: The typical starting working dilution is 1:50.

Reactivity: Hamster, Human, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

**Immunogen:** Recombinant GC1q-R corresponding to mature GC1q-R (amino acids 74-282)

**Specificity:** The monoclonal antibody 60.11 recognizes a cell membrane C1q binding molecule that

recognises the globular heads of C1q. It is also present in plasma and the extracellular matrix. The monoclonal antibody 60.11 is directed against epitopes situated within the NH2-terminal stretch of gC1q-R corresponding to residues 76-93. Clone 60.11 recognizes the putative C1q binding site and reacts with the mature form, but has poor or no reactivity with the truncated

form, lacking residues 74-95.

Formulation: PBS

Label: FITC

State: Liquid 0.2 µm filtered lg fraction Stabilizer: 1% bovine serum albumin

Concentration: lot specific

Purification: Protein G

Conjugation: FITC

**Storage:** Store at 2 - 8 °C.

**Stability:** Shelf life: one year from despatch.





## GC1q R (C1QBP) (76-93) Mouse Monoclonal Antibody [Clone ID: 60.11] - AM26294FC-N

**Gene Name:** complement component 1, q subcomponent binding protein

Database Link: Entrez Gene 708 Human

Q07021

Background: The molecule is an unusually acidic, single chain protein with an apparent molecular weight

of 33 kDa. It does not possess a conventional sequence motif compatible with a membrane spanning segment nor a consensus site for a GPI anchor. gC1q-R migrates as a single chain under both reducing and non-reducing conditions, but it behaves as an oligomer on gel-filtration in non-dissociating conditions. Its multimer formation may be a critical process by

which the gC1q-R molecule increases its affinity for multivalent ligands such as C1q.

gC1q-R has been shown to inhibit complement activation by preventing the binding of C1q to antibodies, suggesting that the binding site for gC1q-R and the binding site for immune complexes, which are present on the C1q globular 'heads', may be located at the same position. gC1q-R is capable of interacting with several proteins involved in blood clotting, namely, thrombin, prothrombin, the heparinbinding form of vitronectin, the ternary complex, vitronectin-thrombin-antithrombin, as well as high-molecular-weight kininogen and Hageman factor. Besides its role in the complement pathway, gC1q-R participates in enhancement of

Fc-receptor and CR1-mediated phagocytosis, procoagulant activity on platelets, and chemotactic activity on mast cells, eosinophils, neutrophils, and fibroblasts.

gC1q-R is expressed on a wide variety of cells and can serve as a binding site for plasma and microbial proteins. Its antigenic sites may be cryptic on cells in suspension but become exposed when the cells are fixed by bifunctional cross-linkers. Probably it is also expressed on the cell membrane as a tetramer. Crosslinking or activation may thus bring about a

tetrameric assembly of gC1q-R followed by a conformational change within the molecule, thereby exposing epitopes which are otherwise hidden. A form of GC1q-R is also found inside

the cell. Intracellular gC1q-R has been shown to bind the cytoplasmic tail of the  $\alpha 1B\text{-}$ 

adrenergic receptor and to PKCµ.

Synonyms: GC1QBP, HABP1, SF2P32, GC1q-R protein, p33, p32