

Product datasheet for AM32139PU-N

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

CD21 (CR2) Mouse Monoclonal Antibody [Clone ID: 4C5]

Product data:

Product Type: Primary Antibodies

Clone Name: 4C5
Applications: IF, IHC

Recommended Dilution: Immunofluorescence.

Flow Cytometry: 1/50.

Immunohistochemistry on (Aceton-Fixed) Frozen Sections and Cytospin

preparations. Use ~1/20-1/50 dilution (depends on technique).

Reactivity: Human
Host: Mouse
Isotype: IgG2a

Clonality: Monoclonal

Immunogen: A BALB/c mouse was immunized subcutaneously in its footpads with fragments of a Human

tonsil.

After fusing the lymphocytes from the popliteal lymph nodes of this mouse with murine

SP2/0 myeloma cells

Specificity: This Monoclonal antibody *4C5* with the CD21 (140kD) molecule, expressed (moderate) on

mature B-cells and (at high density) on follicular dendritic cells (FDC).

The antibody producing cells were selected on their immunohistochemical staining pattern. Later on the antibody was biochemi-cally analysed and revealed to recognize the CD21

molecule (140kD) by Immunoprecipitation procedures.

4C5 shows moderate labeling of mature B-cells and strong labeling of FDC's on acetone-fixed cryostat sections, air-dried and acetone-fixed cells and Immunofluorescence and Immuno-

peroxidase tests.

Formulation: State: Ig Fraction

State: Liquid Ig fraction

Preservative: 0.09% Sodium Azide

Concentration: lot specific

Conjugation: Unconjugated





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Storage: Store the antibody undiluted at 2-8°C for Three months or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: 145 kDa

Gene Name: complement component 3d receptor 2

Database Link: Entrez Gene 1380 Human

P20023

Background: CD21 is a type I integral membrane glycoprotein that serves as a receptor for the C3d

complement fragment and for the Epstein-Barr virus. It plays a role in B cell activation and proliferation and undergoes phosphorylation after B cell activation with phorbol esters. CD21 is expressed on mature B cells, follicular Dendritic cells, pharyngeal and cervical epithelial cells and a subset of thymocytes. The adaptive immune response is tightly regulated to limit responding cells in an antigen-specific manner. On B cells, co-receptors CD21/CD19 modulate the strength of B cell Ag receptor (BCR) signals, thereby influencing cell fate.

Complement receptor (CR) type 2 (CR2/ CD21) is normally expressed during the immature and mature stages of B cell development. In association with CD19, CR21 plays an important

role in enhancing mature B cell responses to foreign antigen.

Synonyms: Complement receptor type 2, CR2, C3DR, C3d receptor, EBV Receptor, Dendritic Cell Marker