

CD21 / CR2 / C3d-Receptor / EBV-Receptor Antibody - With BSA and Azide
Mouse Monoclonal Antibody [Clone FR5A10]
Catalog # AH11127

Specification

CD21 / CR2 / C3d-Receptor / EBV-Receptor Antibody - With BSA and Azide - Product Information

| | |
|-------------------|------------------------------|
| Application | ,13,3,4, |
| Primary Accession | P20023 |
| Other Accession | 1380, 445757 |
| Reactivity | Human |
| Host | Mouse |
| Clonality | Monoclonal |
| Isotype | Mouse / IgG1, kappa |
| Calculated MW | 140kDa KDa |

CD21 / CR2 / C3d-Receptor / EBV-Receptor Antibody - With BSA and Azide - Additional Information

Gene ID 1380

Other Names

Complement receptor type 2, Cr2, Complement C3d receptor, Epstein-Barr virus receptor, EBV receptor, CD21, CR2, C3DR

Storage

Store at 2 to 8°C. Antibody is stable for 24 months.

Precautions

CD21 / CR2 / C3d-Receptor / EBV-Receptor Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

CD21 / CR2 / C3d-Receptor / EBV-Receptor Antibody - With BSA and Azide - Protein Information

Name CR2

Synonyms C3DR

Function

Serves as a receptor for various ligands including complement component CD3d, HNRNPU OR IFNA1 (PubMed: [1849076](http://www.uniprot.org/citations/1849076)), PubMed: [21527715](http://www.uniprot.org/citations/21527715)), PubMed: [7753047](http://www.uniprot.org/citations/7753047)). When C3d is bound to antigens, attaches to C3d on B- cell surface and thereby facilitates the recognition and uptake of antigens by B-cells (PubMed: [21527715](http://www.uniprot.org/citations/21527715)). This interaction enhances B-cell activation and subsequent immune responses. Forms a complex with

several partners on the surface of B-cells including CD19, FCRL5 and CD81, to form the B-cell coreceptor complex that plays a crucial role in B-cell activation and signaling (PubMed:1383329, PubMed:30107486). Induces also specific intracellular signaling separately from the BCR and CD19 by activating the tyrosine kinase SRC, which then phosphorylates nucleolin/NCL and triggers AKT and GSK3 kinase activities in a SYK/CD19-independent manner (PubMed:12938232). Acts as a ligand for CD23 (FcepsilonRII), a low-affinity receptor for IgE, which is expressed on B-cells and other immune cells, and thus participates in the regulation of IgE production (PubMed:1386409).

Cellular Location

Cell membrane; Single-pass type I membrane protein

Tissue Location

Mature B-lymphocytes, T-lymphocytes, pharyngeal epithelial cells, astrocytes and follicular dendritic cells of the spleen

CD21 / CR2 / C3d-Receptor / EBV-Receptor Antibody - With BSA and Azide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CD21 / CR2 / C3d-Receptor / EBV-Receptor Antibody - With BSA and Azide - Images

CD21 / CR2 / C3d-Receptor / EBV-Receptor Antibody - With BSA and Azide - Background

Recognizes a protein of 140kDa, which is identified as the complement receptor 2 (CR2)/CD21. Its epitope is located in 5-8 short consensus repeats (SCRs). This MAbs is highly specific to CR2 and shows no cross-reaction with CR1. This protein is expressed strongly on mature B cells, follicular dendritic cells and weakly on immature thymocytes and T lymphocytes. In B-cell ontogeny, CD21 appears after the pre-B-stage, is maintained during peripheral B-cell development and is lost upon terminal differentiation into plasma cells. CD21 expression is also gradually lost after stimulation of B cells in vitro. CD21 functions as receptor for C3d, C3dg and iC3b Complement components, for EBV and for IFN α . CD21 binds to CD23 and associates with CD19, CD81 and Leu13 to form a large signal-transduction complex involved in B cell activation. MAbs FR5A10 can be used for EBV receptor studies, interactions between B and T cells especially through CD23, human complement receptor (CR2) studies and IFN- α receptor studies.

CD21 / CR2 / C3d-Receptor / EBV-Receptor Antibody - With BSA and Azide - References

Schlossman SF et al. eds Leukocyte Typing V, p516-522, Oxford University Press, Oxford, 1995. | Aubry JP et al. In Schlossman SF et al eds. Leukocyte Typing V, p535-536, Oxford University Press, Oxford, 1995