

**CR2 / CD21 Antibody (clone Bu32)**  
**Mouse Monoclonal Antibody**  
**Catalog # ALS14927****Specification**

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**CR2 / CD21 Antibody (clone Bu32) - Product Information**

|                   |                                      |
|-------------------|--------------------------------------|
| Application       | IHC-P, IP, FC                        |
| Primary Accession | <a href="#">P20023</a>               |
| Reactivity        | Human                                |
| Host              | Mouse                                |
| Clonality         | Monoclonal                           |
| Calculated MW     | 113kDa KDa                           |
| Dilution          | IHC-P~~N/A<br>IP~~N/A<br>FC~~1:10~50 |

**CR2 / CD21 Antibody (clone Bu32) - Additional Information****Gene ID** 1380**Other Names**

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

**Target/Specificity**

Recognizes human CD21, a 145kD cell surface glycoprotein expressed by mature B lymphocytes, follicular dendritic cells, subsets of normal thymocytes and subsets of T cells. The CD21 molecule acts as a receptor for complement components C3d, C3dg and ...

**Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

**Precautions**

CR2 / CD21 Antibody (clone Bu32) is for research use only and not for use in diagnostic or therapeutic procedures.

**CR2 / CD21 Antibody (clone Bu32) - Protein Information****Name** CR2**Synonyms** C3DR**Function**

Serves as a receptor for various ligands including complement component CD3d, HNRNPU OR IFNA1 (PubMed:<[a href="http://www.uniprot.org/citations/1849076"](http://www.uniprot.org/citations/1849076)>1849076</a>, PubMed:<[a href="http://www.uniprot.org/citations/21527715"](http://www.uniprot.org/citations/21527715)>21527715</a>, PubMed:<[a href="http://www.uniprot.org/citations/7753047"](http://www.uniprot.org/citations/7753047)>7753047</a>). 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:<a href="http://www.uniprot.org/citations/21527715" target="\_blank">21527715</a>). 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:<a href="http://www.uniprot.org/citations/1383329" target="\_blank">1383329</a>, PubMed:<a href="http://www.uniprot.org/citations/30107486" target="\_blank">30107486</a>). Also induces 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:<a href="http://www.uniprot.org/citations/12938232" target="\_blank">12938232</a>). Acts as a ligand for CD23 (FcεpsilonRII), 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:<a href="http://www.uniprot.org/citations/1386409" target="\_blank">1386409</a>).

#### **Cellular Location**

Cell membrane; Single-pass type I membrane protein

#### **Tissue Location**

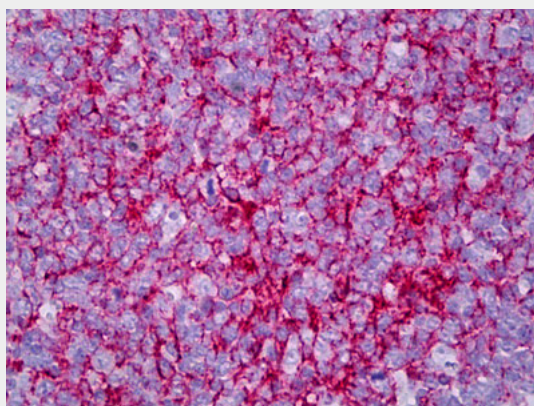
Mature B-lymphocytes, T-lymphocytes, pharyngeal epithelial cells, astrocytes and follicular dendritic cells of the spleen

### **CR2 / CD21 Antibody (clone Bu32) - 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](#)

### **CR2 / CD21 Antibody (clone Bu32) - Images**



Anti-CR2 / CD21 antibody IHC of human tonsil, germinal center.

### **CR2 / CD21 Antibody (clone Bu32) - Background**

Receptor for complement C3Dd, for the Epstein-Barr virus on human B-cells and T-cells and for

HNRPU. Participates in B lymphocytes activation.

**CR2 / CD21 Antibody (clone Bu32) - References**

Fujisaku A.,et al.J. Biol. Chem. 264:2118-2125(1989).  
Weis J.J.,et al.J. Exp. Med. 167:1047-1066(1988).  
Moore M.,et al.Proc. Natl. Acad. Sci. U.S.A. 84:9194-9198(1987).  
Barel M.,et al.Mol. Immunol. 35:1025-1031(1998).  
Ota T.,et al.Nat. Genet. 36:40-45(2004).