

**Anti-CD21 Antibody**  
**Mouse monoclonal antibody to CD21**  
**Catalog # AP61605****Specification**

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**Anti-CD21 Antibody - Product Information**

Application	<b>IF, IP</b>
Primary Accession	<a href="#">P20023</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Calculated MW	<b>112916</b>

**Anti-CD21 Antibody - Additional Information****Gene ID** 1380**Other Names**

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

**Target/Specificity**

Recognizes endogenous levels of CD21 protein.

**Dilution**

IF~~IH (1/100 - 1/300)

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**Format**

Mouse IgG1. Liquid in PBS containing 50% glycerol, 0.2% BSA and 0.09% (W/V) sodium azide.

**Storage**

Store at -20 °C. Stable for 12 months from date of receipt

**Anti-CD21 Antibody - 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:<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>). 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:<a href="http://www.uniprot.org/citations/12938232" target="\_blank">12938232</a>). 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:<a href="http://www.uniprot.org/citations/1386409" target="\_blank">1386409</a>).

#### Cellular Location

Cell membrane; Single-pass type I membrane protein

#### Tissue Location

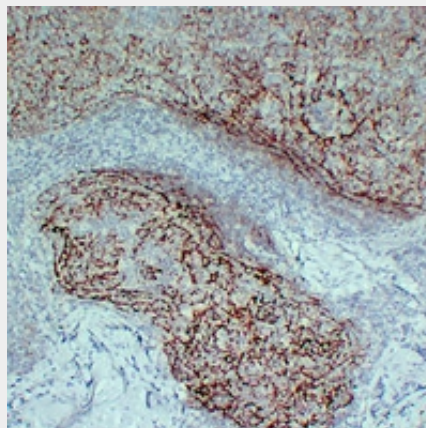
Mature B-lymphocytes, T-lymphocytes, pharyngeal epithelial cells, astrocytes and follicular dendritic cells of the spleen

### Anti-CD21 Antibody - Protocols

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

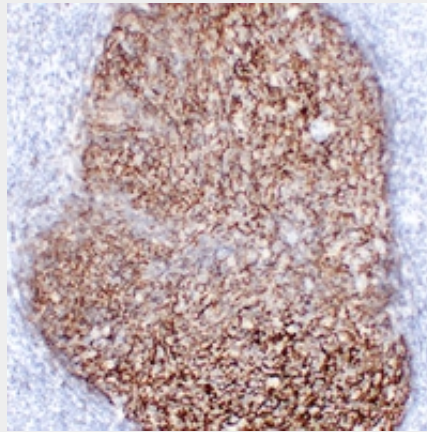
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-CD21 Antibody - Images

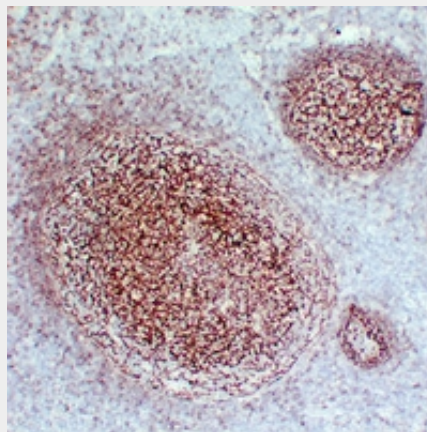


Immunohistochemical analysis of CD21 staining in human follicular lymphoma formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted

with DPX.



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Immunohistochemical analysis of CD21 staining in human tonsil formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

#### **Anti-CD21 Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within human CD21. The exact sequence is proprietary.