10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# CD21 Monoclonal Antibody(2C5)

Catalog # AP63314

## Product Information

| | |
|---|---|
| **Application** | IHC, IF, ICC |
| **Primary Accession** | P20023 |
| **Reactivity** | Human, Mouse, Rat |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Calculated MW** | 112916 |

## Additional Information

| | |
|---|---|
| **Gene ID** | 1380 |
| **Other Names** | CR2; C3DR; Complement receptor type 2; Cr2; Complement C3d receptor; Epstein-Barr virus receptor; EBV receptor; CD21 |
| **Dilution** | IHC~~1:100~500 IF~~1:50~200 ICC~~N/A |
| **Format** | PBS, pH 7.4, containing 0.09% (W/V) sodium azide as Preservative and 50% Glycerol. |
| **Storage Conditions** | -20℃ |

## Protein Information

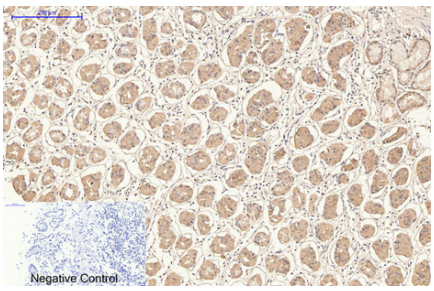
| | |
|---|---|
| **Name** | CR2 |
| **Synonyms** | C3DR |
| **Function** | Serves as a receptor for various ligands including complement component CD3d, HNRNPU OR IFNA1 (PubMed:1849076, PubMed:21527715, PubMed:7753047). When C3d is bound to antigens, attaches to C3d on B- cell surface and thereby facilitates the recognition and uptake of antigens by B-cells (PubMed:21527715). 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). 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: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 |

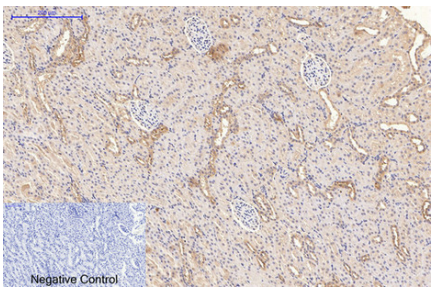
## Background

Receptor for complement C3, for the Epstein-Barr virus on human B-cells and T-cells and for HNRNPU (PubMed:7753047). Participates in B lymphocytes activation (PubMed:7753047).

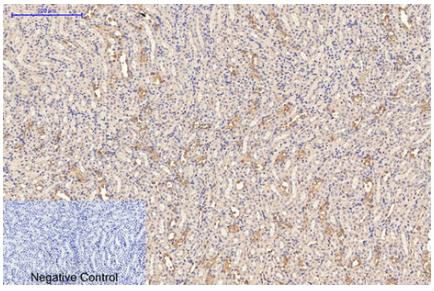
## Images



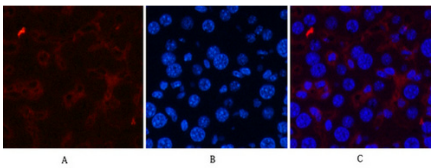

Immunohistochemical analysis of paraffin-embedded Human-stomach tissue. 1,CD21 Monoclonal Antibody(2C5) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



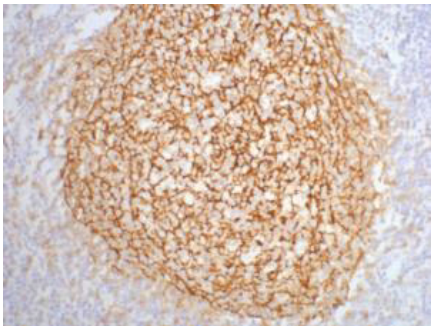

Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,CD21 Monoclonal Antibody(2C5) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.




Immunohistochemical analysis of paraffin-embedded Mouse-kidney tissue. 1,CD21 Monoclonal Antibody(2C5) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.




Immunofluorescence analysis of Mouse-liver tissue. 1,CD21 Monoclonal Antibody(2C5)(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



IHC staining of human tonsil tissue, diluted at 1:200.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.