

## **Anti-CD21 CR2 Rabbit Monoclonal Antibody**

**Catalog # ABO13420** 

## **Specification**

# **Anti-CD21 CR2 Rabbit Monoclonal Antibody - Product Information**

Application WB, IHC, IF, ICC, IP, FC

Primary Accession

Host
Isotype
Reactivity
Clonality
Format

P20023
Rabbit
Rabbit
Rabbit IgG
Human, Mouse
Monoclonal
Liquid

**Description** 

Anti-CD21 CR2 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse.

# **Anti-CD21 CR2 Rabbit Monoclonal Antibody - Additional Information**

**Gene ID 1380** 

#### **Other Names**

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

Calculated MW 112916 MW KDa

#### **Application Details**

WB 1:1000-1:5000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200<br>IP 1:50<br>FC 1:50</br>

#### **Subcellular Localization**

Membrane; Single-pass type I membrane protein.

#### **Tissue Specificity**

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

# **Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

## **Immunogen**

A synthesized peptide derived from human CD21

#### **Purification**

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for



up to one month. Avoid repeated freeze-thaw cycles.

# **Anti-CD21 CR2 Rabbit Monoclonal Antibody - 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" target=" blank">1849076</a>, PubMed:<a href="http://www.uniprot.org/citations/21527715" target="blank">21527715</a>, PubMed:<a href="http://www.uniprot.org/citations/7753047" target="\_blank">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 (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

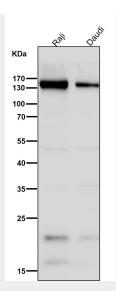
## Anti-CD21 CR2 Rabbit Monoclonal Antibody - Protocols

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

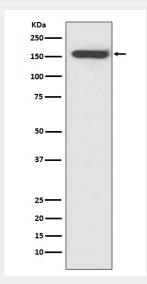
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

#### Anti-CD21 CR2 Rabbit Monoclonal Antibody - Images

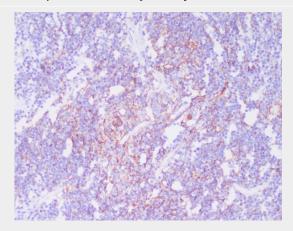




All lanes use the Antibody at 1:3K dilution for 1 hour at room temperature.



Western blot analysis of CD21 expression in Raji cell lysate.



Immunohistochemical analysis of paraffin-embedded human spleen, using CD21 Antibody.