

CR2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6965b

Specification

CR2 Antibody (C-term) - Product Information

Application	FC, IHC-P, WB,E
Primary Accession	<u>P20023</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
lsotype	Rabbit IgG
Antigen Region	986-1014

CR2 Antibody (C-term) - 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

This CR2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 986-1014 amino acids from the C-terminal region of human CR2.

Dilution FC~~1:10~50 IHC-P~~1:50~100 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CR2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CR2 Antibody (C-term) - Protein Information

Name CR2



Synonyms C3DR

Function Serves as a receptor for various ligands including complement component CD3d, HNRNPU OR IFNA1 (PubMed:<u>1849076</u>, PubMed:<u>21527715</u>, PubMed:<u>7753047</u>). 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:<u>21527715</u>). 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:<u>1383329</u>, PubMed:<u>30107486</u>). 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:<u>12938232</u>). 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:<u>1386409</u>).

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 Antibody (C-term) - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CR2 Antibody (C-term) - Images



Western blot analysis of CR2 Antibody (C-term) (Cat. #AP6965b) in Ramos cell line lysates (35ug/lane). CR2 (arrow) was detected using the purified Pab.





Formalin-fixed and paraffin-embedded human Lymph reacted with CR2 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



CR2 Antibody (C-term) (Cat. #AP6965b) flow cytometry analysis of Ramos cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CR2 Antibody (C-term) - Background

CR2 is a membrane protein, which functions as a receptor for Epstein-Barr virus (EBV) binding on B and T lymphocytes.

CR2 Antibody (C-term) - References

Rikova,K., et.al., Cell 131 (6), 1190-1203 (2007)