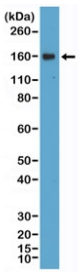
CD21 Antibody for WB / Complement Receptor 2 Detection Antibody [clone RM372] (R20391)

Catalog No.	Formulation	Size
R20391-0.1ML	Antibody in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	100 ul

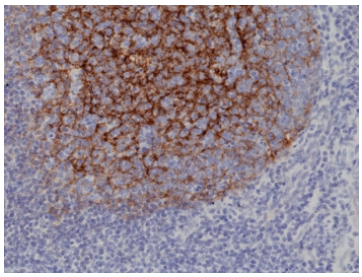
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM372
Purity	Protein A purified from animal origin-free supernatant
UniProt	P20023
Localization	Cell surface
Applications	Immunohistochemistry (FFPE): 1:500-1:1000 Western blot: 1:200-1:1000
Limitations	This CD21 Antibody for WB / Complement Receptor 2 Detection Antibody is available for research use only.



CD21 Antibody Daudi WB. Western blot analysis of Complement Receptor 2 / CD21 in human Daudi cell lysate using recombinant CD21 antibody. A band is detected at approximately 150-160 kDa, consistent with glycosylated CD21, which migrates above its predicted molecular weight of approximately 113 kDa due to post-translational modification of this B-cell surface receptor.



CD21 Antibody Germinal Center IHC. Immunohistochemistry of Complement Receptor 2 / CD21 in FFPE human tonsil tissue using recombinant rabbit monoclonal CD21 antibody, clone RM372. HRP-DAB brown staining highlights dense membranous labeling of B lymphocytes within germinal center regions with an underlying reticular follicular dendritic cell network, while surrounding lymphoid cells show minimal staining and nuclei are counterstained blue.

Description

Complement receptor 2 (CR2), also known as CD21, is a glycosylated cell surface receptor that plays a key role in B-cell activation and complement-mediated immune responses. CD21 Antibody for WB / Complement Receptor 2 Detection Antibody is optimized for western blot applications, enabling reliable detection of CD21 in cell lysates while maintaining compatibility with tissue-based assays. CD21 antibody, also referred to as CR2 antibody in the literature, is widely used in studies of B-cell biology, immune signaling, and host-pathogen interactions.

CD21 is primarily expressed on mature B lymphocytes and follicular dendritic cells, where it functions as part of the B-cell co-receptor complex and binds complement fragment C3d to enhance antigen-specific signaling. It also serves as the receptor for Epstein-Barr virus, facilitating viral entry into B cells. These roles make CD21 a key target in both immunological and infectious disease research.

In western blot analysis, CD21 is typically detected at an apparent molecular weight higher than its theoretical mass due to extensive glycosylation. Although the predicted molecular weight is approximately 113 kDa, the mature receptor commonly migrates in the range of 140-160 kDa. Detection of a band in this higher molecular weight range is consistent with published findings and reflects post-translational modification of the protein.

Western blot testing using B-cell-derived lysates such as Daudi cells demonstrates clear detection of CD21 under the conditions tested, supporting the suitability of this antibody for protein analysis in relevant immune cell models. The ability to detect glycosylated CD21 species provides confidence in target recognition and assay performance in biochemical applications.

In addition to western blot, this antibody is also applicable to immunohistochemistry, where CD21 expression is observed in lymphoid tissues such as tonsil. In these tissues, CD21 highlights follicular dendritic cell networks and B-cell-rich germinal centers, providing complementary spatial information to biochemical detection methods.

The recombinant rabbit monoclonal clone RM372 antibody provides reliable detection of CD21 in western blot applications while maintaining compatibility with tissue-based assays. Its performance in both biochemical and histological contexts makes it a useful tool for studies of complement receptor function, B-cell signaling, and immune system organization.

For a validated reference of CD21 expression across B cells and follicular dendritic cell networks, see CD21 antibody clone CR2/2754 with supporting multi-application data.

Application Notes

The stated application concentrations are suggested starting points. Titration of the CD21 Antibody for WB / Complement Receptor 2 Detection Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A peptide corresponding to the C-terminus of human CD21 (Complement receptor type 2) was used as the immunogen for the recombinant CD21 antibody.

Storage

Store the CD21 antibody at -20oC.

Alternate Names

CR2 antibody, Complement receptor 2 antibody, CD21 WB antibody, B-cell receptor CD21 antibody, Epstein-Barr virus receptor antibody

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