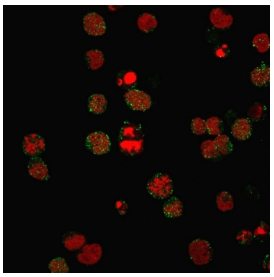
CD21 Antibody for IF / Complement Receptor 2 Immunofluorescence Antibody [clone CR2/3124R] (V7754)

Catalog No.	Formulation	Size
V7754-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7754-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7754SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

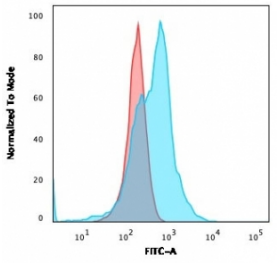
Recombinant RABBIT MONOCLONAL

Bulk quote request

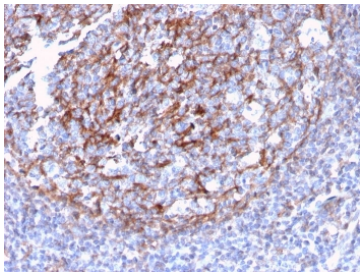
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	CR2/3124R
Purity	Protein A affinity chromatography
UniProt	P20023
Localization	Cell surface
Applications	Flow cytometry: 1-2ug/million cells in 0.1ml Immunofluorescence: 1-2ug/ml Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This CD21 Antibody for IF / Complement Receptor 2 Immunofluorescence Antibody is available for research use only.



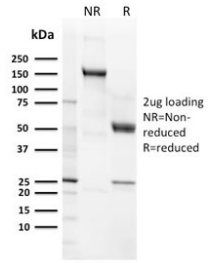
CD21 Antibody Cell Surface IF. Immunofluorescence analysis of Complement Receptor 2 / CD21 in PFA-fixed human MOLT4 cells using recombinant rabbit monoclonal CD21 antibody, clone CR2/3124R. Green fluorescence highlights membrane-associated and punctate CD21 signal consistent with receptor localization, while nuclei are counterstained with Reddot (red), providing cellular context.



CD21 Antibody Cell Population FACS. Flow cytometry analysis of Complement Receptor 2 / CD21 in PFA-fixed human MOLT4 cells using recombinant CD21 antibody, clone CR2/3124R. The blue histogram shows a clear rightward shift relative to the red isotype control, indicating detectable CD21 expression under the conditions tested.



CD21 Antibody Germinal Network IHC. Immunohistochemistry of Complement Receptor 2 / CD21 in FFPE human tonsil tissue using recombinant rabbit monoclonal CD21 antibody, clone CR2/3124R. HRP-DAB brown staining highlights a reticular follicular dendritic cell network within germinal center regions, with associated membranous staining of B lymphocytes, while surrounding lymphoid cells show minimal staining and nuclei are counterstained blue. Heat induced epitope retrieval was performed by boiling tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 10-20 min followed by cooling prior to staining.



SDS-PAGE analysis of purified, BSA-free recombinant CD21 antibody (clone CR2/3124R) as confirmation of integrity and purity.

Description

Complement receptor 2 (CR2), also known as CD21, is a cell surface glycoprotein that functions as part of the B-cell co-receptor complex and plays a central role in antigen recognition and immune activation. CD21 Antibody for IF / Complement Receptor 2 Immunofluorescence Antibody is optimized for fluorescence-based detection of CD21, enabling visualization of its distribution in cellular systems. 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 binds complement fragments such as C3d to enhance B-cell receptor signaling. In addition to its role in adaptive immunity, CD21 serves as the receptor for Epstein-Barr virus, mediating viral attachment and entry into B cells. These functions make CD21 an important marker for both normal immune processes and disease-related mechanisms.

In immunofluorescence applications, CD21 is typically observed as membrane-associated and punctate fluorescence corresponding to cell surface localization and receptor clustering. This allows detailed visualization of CD21 distribution at the single-cell level and supports studies of receptor organization and cellular heterogeneity. Fluorescence-based detection also enables co-localization studies with other immune markers, providing insight into complex signaling environments.

Immunofluorescent staining of human MOLT4 cells demonstrates detectable CD21 signal under the conditions tested, with green fluorescence marking CD21-positive regions and nuclear counterstaining providing cellular context. This supports the use of CD21 antibody for IF in cell-based assays where spatial resolution and subcellular localization are important.

In addition to immunofluorescence, this antibody is compatible with complementary applications including immunohistochemistry and flow cytometry, allowing consistent detection of CD21 across experimental platforms. Flow cytometry enables quantitative assessment of CD21-positive populations, while immunohistochemistry supports visualization of tissue-level expression patterns in lymphoid structures.

The recombinant rabbit monoclonal clone CR2/3124R antibody provides reliable fluorescence signal and consistent performance in IF applications. Its ability to visualize CD21 distribution at the cellular level makes it well suited for studies of B-cell activation, receptor localization, and immune cell characterization.

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

Optimal dilution of the CD21 Antibody for IF / Complement Receptor 2 Immunofluorescence Antibody should be determined by the researcher.

Immunogen

A partial protein corresponding to amino acids 142-240 was used as the immunogen for the recombinant CD21 antibody.

Storage

Store the CD21 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

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

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