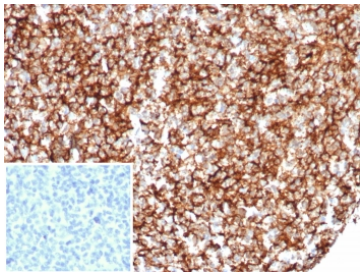
CR1 Antibody / Follicular Dendritic Cell Network Marker [clone rCR1/8599] (V4797)

Catalog No.	Formulation	Size
V4797-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4797-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4797SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

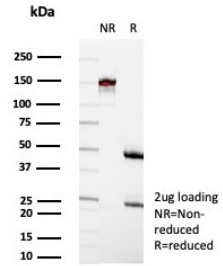
Recombinant MOUSE MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rCR1/8599
Purity	Protein A/G affinity
UniProt	P17927
Localization	Cell surface
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This CR1 Antibody / Follicular Dendritic Cell Network Marker is available for research use only.



CR1 Antibody Tonsil IHC. Immunohistochemistry of Complement Receptor 1 / CR1 in FFPE human tonsil tissue using recombinant mouse monoclonal CR1 antibody, clone rCR1/8599. HRP-DAB brown staining highlights a dense reticular follicular dendritic cell network within germinal centers, showing a characteristic mesh-like pattern consistent with complement receptor localization and germinal center architecture, while surrounding lymphocytes show minimal staining and nuclei are counterstained blue. Inset: PBS was used in place of primary antibody as a negative control to confirm specificity of staining. Heat induced epitope retrieval was performed by boiling tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 min followed by cooling prior to staining.



SDS-PAGE analysis of purified, BSA-free recombinant CR1 antibody (clone rCR1/8599) as confirmation of integrity and purity.

Description

Complement receptor 1 (CR1), also known as CD35, is a membrane-associated glycoprotein that plays a central role in complement regulation and immune complex handling. CR1 Antibody / Follicular Dendritic Cell Network Marker (clone rCR1/8599) is optimized for visualization of follicular dendritic cell (FDC) networks within lymphoid tissues, where CR1 expression is most prominently observed. CR1 antibody, also referred to as CD35 antibody in the literature, is widely used to study germinal center architecture and complement-mediated immune processes.

CR1 is expressed on multiple immune cell types including erythrocytes, B cells, monocytes, and most notably follicular dendritic cells within lymphoid follicles. Its primary function is to bind complement components such as C3b and C4b, facilitating the clearance and retention of immune complexes. In germinal centers, CR1 enables follicular dendritic cells to trap antigen-antibody complexes, allowing prolonged antigen presentation to B cells and supporting affinity maturation.

In immunohistochemistry, CR1 is characteristically detected as a reticular, mesh-like staining pattern corresponding to follicular dendritic cell networks. These networks are most evident within germinal centers of tissues such as tonsil, lymph node, and spleen. The distinct distribution pattern allows clear visualization of lymphoid follicle organization and provides valuable context for studies of B-cell activation and immune microenvironment structure.

Functionally, CR1 contributes to immune regulation by limiting complement activation and promoting the safe clearance of immune complexes. Its role in maintaining immune homeostasis is critical, and altered CR1 expression or function has been associated with immune dysregulation and disease. In addition, CR1 is frequently evaluated in the context of lymphoid neoplasms and follicular dendritic cell-derived tumors, where its expression can aid in identifying tumor origin and stromal organization.

The ability to highlight follicular dendritic cell networks makes CR1 antibody particularly useful for examining germinal center integrity and lymphoid tissue architecture. This is especially relevant in studies of lymphoid hyperplasia, autoimmune conditions, and tumor microenvironments, where the organization of FDC networks can be altered.

The recombinant mouse monoclonal clone rCR1/8599 antibody provides reliable detection of CR1 in immunohistochemistry applications. Its capacity to clearly delineate follicular dendritic cell networks supports its use in research focused on immune organization, complement biology, and germinal center dynamics.

For a validated reference of CD35 expression highlighting follicular dendritic cell networks in lymphoid tissue, see CD35 antibody clone CR1/6378 with supporting immunohistochemistry data.

Application Notes

Optimal dilution of the CR1 Antibody / Follicular Dendritic Cell Network Marker should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 600-900) from the human protein was used as the immunogen for the recombinant CR1 antibody.

Storage

Aliquot the CR1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

CD35 antibody, Complement receptor 1 antibody, CR1 protein antibody, Follicular dendritic cell marker antibody, Immune complex receptor antibody

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