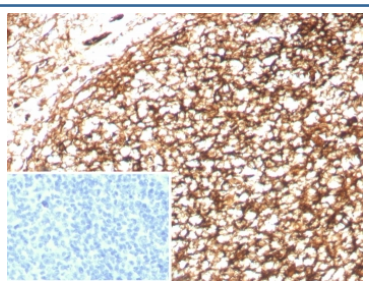
Complement Receptor 1 Antibody / Immune Complex Clearance Receptor [clone CR1/8833R] (V4808)

Catalog No.	Formulation	Size
V4808-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4808-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4808SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

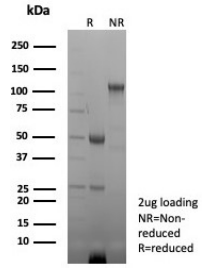
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	CR1/8833R
Purity	Protein A/G affinity
UniProt	P17927
Localization	Cell surface
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This Complement Receptor 1 Antibody / Immune Complex Clearance Receptor is available for research use only.



Complement Receptor 1 Antibody Tonsil IHC. Immunohistochemistry of Complement Receptor 1 / CR1 in FFPE human tonsil tissue using recombinant rabbit monoclonal Complement Receptor 1 antibody, clone CR1/8833R. HRP-DAB brown staining highlights a dense reticular follicular dendritic cell network within germinal centers, consistent with complement-mediated immune complex retention, 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 Complement receptor 1 antibody (clone CD35/8833R) as confirmation of integrity and purity.

Description

Complement receptor 1 (CR1), also known as CD35, is a membrane-associated glycoprotein that functions as a key immune complex clearance receptor and regulator of complement activation. Complement Receptor 1 Antibody / Immune Complex Clearance Receptor (clone CR1/8833R) is designed to study the functional role of CR1 in complement-mediated immune processes, particularly its interaction with complement components C3b and C4b. CR1 antibody, also referred to as CD35 antibody in the literature, is widely used to investigate immune complex handling, complement regulation, and immune homeostasis.

CR1 is expressed on a range of cell types including erythrocytes, B cells, monocytes, neutrophils, and follicular dendritic cells. Its primary function is to bind opsonized immune complexes through recognition of C3b and C4b, facilitating their clearance from circulation. On erythrocytes, CR1 plays a particularly important role in transporting immune complexes to the liver and spleen for removal, thereby preventing deposition in tissues and limiting inflammatory damage.

In addition to immune complex clearance, CR1 acts as a regulator of complement activation by serving as a cofactor for factor I-mediated cleavage of C3b and C4b. This regulatory function helps control complement cascade activity and prevents excessive immune responses. As such, CR1 is an important component of innate immunity and contributes to maintaining balance between effective pathogen clearance and protection of host tissues.

In immunohistochemistry, CR1 expression can be observed in lymphoid tissues where it contributes to immune organization and complement handling. While follicular dendritic cell networks represent a prominent site of CR1 localization, its broader expression across immune cell types reflects its functional role in complement biology rather than a single structural compartment. Complement Receptor 1 antibody is therefore well suited for studies examining complement receptor distribution and immune complex dynamics.

Alterations in CR1 expression or function have been associated with a variety of disease states, including autoimmune disorders, infectious diseases, and conditions involving immune complex deposition. Reduced CR1 expression on erythrocytes, for example, has been linked to impaired immune complex clearance and increased susceptibility to inflammation. CR1 antibody is therefore frequently used in research focused on complement dysregulation and immune-mediated disease mechanisms.

The recombinant rabbit monoclonal clone CR1/8833R antibody provides reliable detection of CR1 in immunological applications. Its emphasis on functional receptor biology makes it particularly useful for studies of complement pathways, immune complex clearance, and regulation of innate and adaptive immune responses.

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 Complement Receptor 1 Antibody / Immune Complex Clearance Receptor 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 Complement receptor 1 antibody.

Storage

Aliquot the Complement receptor 1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

CD35 antibody, CR1 antibody, Complement receptor 1 antibody, Immune complex receptor antibody, C3b receptor antibody, C4b receptor antibody

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