Technical Data Sheet

Purified NA/LE Rat Anti-Mouse CD21/CD35

Product Information

Material Number: 559831
Alternate Name: CR2/CR1
Size: 0.5 mg
Concentration: 1.0 mg/ml
Clone: 7G6
Immunogen: Purified Mouse CR1
Isotype: Rat (SD) IgG2b, κ
Reactivity: Mouse
Storage Buffer: No azide/low endotoxin: Aqueous buffered solution containing no preservative, 0.2µm sterile filtered. Endotoxin level is ≤0.01 EU/µg (≤0.001 ng/µg) of protein as determined by the LAL assay.

Description

The 7G6 antibody recognizes an epitope shared by 145-150-kDa and 190-kDa complement receptor proteins, originally designated CR2 (CD21) and CR1 (CD35), respectively. In the mouse, CD21 and CD35 are expressed on the majority of peripheral B lymphocytes, on the majority of resident peritoneal macrophages and mast cells, on peripheral blood granulocytes after treatment with N-formyl-Met-Leu-Phe, and on follicular dendritic cells, but not on thymocytes, T cells, erythrocytes, or platelets. CD21 is a ligand-binding component of the CD19/CD21/CD81 signal-transduction complex associated with the antigen receptor on B lymphocytes. CD21/CD35 also co-localizes with CD19 on the surface of peritoneal mast cells. Cr2null mice display impaired inflammatory and humoral immune responses in vivo. The 7G6 mAb has been reported to inhibit rosette formation by C3d-bearing sheep erythrocytes, to block the complement dependent trapping of immune complexes by follicular dendritic cells, and to down-regulate mouse CD21/CD35 expression upon in vivo application, thus inhibiting primary antibody responses to immunization. Co-stimulation of B-cell differentiation via Sepharose-coupled 7G6 antibody has also been observed. The 7G6 mAb recognizes an epitope on CD35 distinct from the epitope recognized by anti-mouse CD35, clone 8C12 (Cat. No. 558768, for the purified antibody), and it does not block binding of 8C12 mAb to mouse CD35.

Preparation and Storage

Store undiluted at 4°C.
The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
This preparation contains no preservatives, thus it should be handled under aseptic conditions.

Application Notes

Application

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Suggested Companion Products

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<tr>
<td>553985</td>
<td>Purified NA/LE Rat IgG2b, κ Isotype Control</td>
<td>0.5 mg</td>
<td>A95-1</td>
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<tr>
<td>554016</td>
<td>FITC Goat Anti-Rat IgG1</td>
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<td>Polyclonal</td>
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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.

References


Oliver AM, Martin F, Kearney JF. IgMhigh/IgDhigh lymphocytes enriched in the splenic marginal zone generate effector cells more rapidly than the bulk of follicular B cells. J Immunol. 1999; 162(12):7198-7207. (Biology)


