

CL200P

Monoclonal Antibody to Complement C3 - Purified

Alternate names:	C3 and PZP-like alpha-2-macroglobulin domain-containing protein 1, CPAMD1, Complement component 3
Quantity:	0.25 mg
Concentration:	1.0 mg/ml
Background:	C3 is the most abundant complement protein in serum. C3 and its cleavage products, C3a and C3b, play a central role in the complement activation cascade. C3b forms an integral part of the C3 and C5 convertases as it promotes complement activation and the subsequent formation of the membrane attack complex. C3a possesses anaphylatoxic as well as various immunoregulatory properties. Also, C3 has been implicated in developmental and non-inflammatory process such as hematopoiesis, skeletal and vascular development and reproduction.
Uniprot ID:	P01027
NCBI:	10090
GeneID:	12266
Host / Isotype:	Rat / IgG2a
Recommended Isotype Controls:	SM15P, SM15PX
Clone:	RMC11H9
Immunogen:	C57BL/6 thymocytes incubated with a rat IgG2b anti-murine Thy-1 (RmT1) and C57BL/6 serum (as a source for C1q). Donor: Lou/c rat spleen cells. Fusion Partner: Mouse myeloma cell line P3X63 Ag. 8.653.
Format:	State: Liquid purified IgG fraction. Purification: Protein G Chromatography. Buffer System: PBS containing 0.02% Sodium Azide as preservative.
Applications:	ELISA. Western blot. Flow Cytometry. Immunofluorescence. Immunohistochemistry on Acetone Fixed Frozen Sections. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognizes C3 as well as the breakdown products C3b, iC3b and C3dg.

Results of Tissue Distribution by Flow Cytometry Analysis:

Mouse strain: C57BL/6
Cell concentration : 1×10^6 cells per test
Antibody Concentration Used: 1.0 $\mu\text{g}/10^6$ cells
Secondary Antibody: Goat anti-Rat IgG FITC (1/500 dilution)

Cell Source: Thymocytes incubated with anti-Mouse CD90 (*Cat. -No CL039P*), then incubated with fresh mouse serum (same strain) and stained as indicated below
Percentage of cells stained above control: 67.4% (see picture below)

Species Reactivity:

Tested: Mouse.

Storage:

Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings:

1. Kremmer, E, Thierfelder S, Felber E, Hoffmann-Fezer, G, and Wasiliu, M. 1990. Monoclonal antibodies to complement componenets without the need of their prior purification. II. Antibodies to mouse C3 and C4. *Hybridoma*. Aug; 9 (4):309-17.
2. Mastellos et al. 2004 . Novel monoclonal antibodies against C3 interfering with complement activation: description of fine specificity and applications to various immunoassays. *Molecular Immunology* 40: 1213-1221.

Pictures:

