Technical Data Sheet

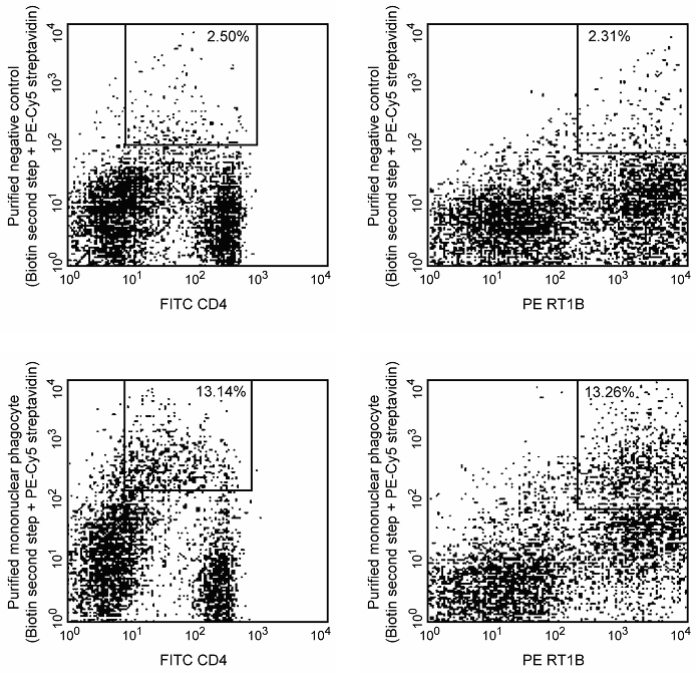
Purified Mouse Anti-Rat Mononuclear Phagocyte

Product Information

Material Number:	**554954**
Size:	0.5 mg
Concentration:	0.5 mg/ml
Clone:	1C7
Immunogen:	Not reported
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Rat
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 1C7 antibody reacts with an antigen found on almost all cells of the mononuclear phagocyte system. Its cellular distribution is reported to be identical to that of CD68 (ED1 Antigen), which has been detected on tissue macrophages, dendritic cells, osteoclasts, resident peritoneal macrophages, alveolar macrophages, and peripheral blood monocytes, but not on granulocytes or lymphocytes. The distribution of ED1+ myeloid cells is similar to that of RT1B (rat I-A equivalent), and all ED1+ cells have acid phosphatase activity.



Three-color evaluation of splenic mononuclear phagocytes. *Single-cell suspensions of Lewis splenocytes were stained with either purified 1C7 antibody (bottom panels) or isotype control (top panels), followed by biotinylated goat anti- mouse Ig, multiple adsorption (all panels, Cat. no.553999). In a third step (all panels), Streptavidin-PE-Cy5 (Cat. no. 554062) was added simultaneously with FITC-conjugated anti-rat mAb CD4 OX-35 (Cat. no. 554837) and PE-conjugated anti-rat RT1B mAb OX-6 (Cat. no. 554929). The percentages of cells with the phenotype of mononuclear phagocytes (CD4+ 1C7+ and RT1B+ 1C7+) are indicated in the boxed regions. Flow cytometry was performed on a BD FACScan™ flow cytometry system.*

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at 4°C.

Application Notes

Application

Flow cytometry	Routinely Tested
Immunohistochemistry-formalin (antigen retrieval required)	Tested During Development
Immunohistochemistry-frozen	Reported

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Suggested Companion Products

Catalog Number	Name	Size	Clone
557273	Purified Mouse IgG1, κ Isotype Control	0.5 mg	MOPC-31C
553999	Biotin Goat Anti-Mouse Ig (Multiple Adsorption)	0.5 mg	Polyclonal
554062	PE-Cy™5 Streptavidin	0.1 mg	(none)
554837	FITC Mouse Anti-Rat CD4	0.5 mg	OX-35
554929	PE Mouse Anti-Rat RT1B	0.2 mg	OX-6

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Sodium azide is a reversible inhibitor of oxidative metabolism; therefore, antibody preparations containing this preservative agent must not be used in cell cultures nor injected into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer. Since endotoxin may also affect the results of functional studies, we recommend the NA/LE (No Azide/Low Endotoxin) antibody format, if available, for in vitro and in vivo use.

References

de Jong, M. W. A. The 1C7 antibody reacts with an antigen found on almost all cells of the mononuclear phagocyte system. .(Biology)

Dijkstra CD, Döpp EA, Joling P, Kraal G. The heterogeneity of mononuclear phagocytes in lymphoid organs: distinct macrophage subpopulations in the rat recognized by monoclonal antibodies ED1, ED2 and ED3. *Immunology.* 1985; 54(3):589-599.(Biology)

van Goor H, Harms G, Gerrits PO, Kroese FG, Poppema S, Grond J. Immunohistochemical antigen demonstration in plastic-embedded lymphoid tissue. *J Histochem Cytochem.* 1988; 36(1):115-120.(Biology)