

Technical Data Sheet

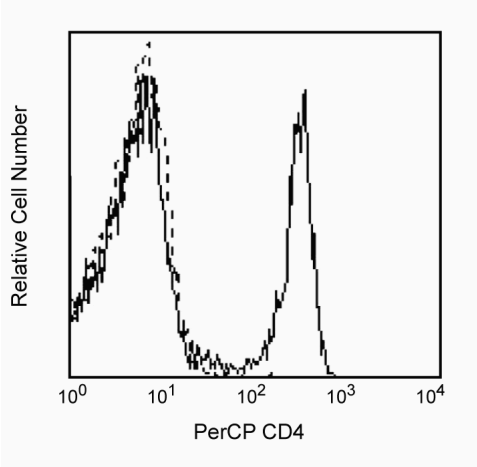
PerCP Mouse Anti-Human CD4

Product Information

Material Number:	550631
Size:	50 tests
Vol. per Test:	20 µl
Clone:	L200
Isotype:	Mouse IgG1, κ
Reactivity:	Human
	QC Testing: Baboon or Cynomolgus or Rhesus
Workshop:	NA
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The L200 monoclonal antibody specifically binds to the human form of the 56 kDa transmembrane glycoprotein, CD4, present on the T-helper/inducer subset of normal human donor peripheral blood lymphocytes. The L200 antibody also crossreacts with a subset of CD3-positive peripheral blood lymphocytes, but not monocytes, of both Rhesus and Cynomolgus Macaque monkeys. Crossreactivity on both lymphocytes and monocytes (weak) from Baboons is also observed. The distribution on lymphocytes is similar for both human and monkey cells, with the majority of CD4-positive lymphocytes being CD8-negative and lacking reactivity with antibodies to B- or NK-cell markers.



Profile of anti-CD4 reactivity on peripheral blood lymphocytes of rhesus macaque (macaca mulatta) analyzed by flow cytometry

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with PerCP under optimum conditions, and unconjugated antibody and free PerCP were removed. Storage of PerCP conjugates in unoptimized diluent is not recommended and may result in loss of signal intensity.

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
559425	PerCP Mouse IgG1 κ Isotype Control	50 tests	MOPC-21

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1×10^6 cells in a 100-µl experimental sample (a test).
2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.

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5. PerCP is a photosynthetic accessory pigment from *Glenodinium* species of dinoflagellates, which is excited by the 488-nm light of an Argon ion laser and fluoresces at 675 nm. Therefore, PerCP-labelled antibodies can be used with FITC- and R-PE-labelled reagents in most single-laser flow cytometers with no significant spectral overlap of PerCP fluorescence with that of FITC or R-PE. PerCP has been reported to undergo significant photobleaching, the magnitude of which increases as laser power is increased or beam focus is narrowed. For third-color flow-cytometric analysis using ≥ 25 -mW laser power, we recommend PE-Cy5-, PE-Cy7-, or PerCP-Cy5.5-conjugated reagents.
6. 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.
7. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

- Bleavins MR, Brott DA, Alvey JD, de la Iglesia FA. Flow cytometric characterization of lymphocyte subpopulations in the cynomolgus monkey (*Macaca fascicularis*). *Vet Immunol Immunopathol.* 1993; 37(1):1-13. (Biology)
- Giorgi JV, Hultin LE, Desrosiers RC. The immunopathogenesis of retroviral diseases: no immunophenotypic alterations in T, B, and NK cell subsets in SIVmac239-challenged rhesus macaques protected by SIV delta nef vaccination. *J Med Primatol.* 1996; 25(3):186-191. (Biology)
- Indzhia LV, Yakovleva LA, Overbaugh J, et al. Baboon T cell lymphomas expressing the B cell-associated surface proteins CD40 and Bgp95. *J Clin Invest.* 1992; 12(3):225-236. (Biology)
- Jacobsen CN, Aasted B, Broe MK, Petersen JL. Reactivities of 20 anti-human monoclonal antibodies with leucocytes from ten different animal species. *Vet Immunol Immunopathol.* 1993; 39(4):461-466. (Biology)
- Knapp W, Dorken B, Rieber EP, et al, ed. *Leucocyte Typing IV*. New York: Oxford University Press; 1989:1-1208. (Biology)
- Powell JD, McClure HM, Anderson D, Fultz PN, Sell KW, Ahmed-Ansari A. Phenotypic and functional differences in NK and LAK cells in the peripheral blood of sooty mangabeys and rhesus macaques. *Cell Immunol.* 1989; 124(1):107-118. (Biology)
- Savary CA, Lotzova E, Jackson HJ, Jardine JH, Ang KK. Analysis of interleukin-2-activated killer cells of rhesus monkeys: striking resemblance to the human system. *J Leukoc Biol.* 1993; 54(4):307-313. (Biology)
- Schlossman S, Boumell L, et al, ed. *Leucocyte Typing V*. New York: Oxford University Press; 1995. (Biology)
- Tryphonas H, Lacroix F, Hayward S, Izaguirre C, Parenteau M, Fournier J. Cell surface marker evaluation of infant *Macaca* monkey leukocytes in peripheral whole blood using simultaneous dual-color immunophenotypic analysis. *J Med Primatol.* 1996; 25(2):89-105. (Biology)
- Verdier F, Aujoulat M, Condevaux F, Descotes J. Determination of lymphocyte subsets and cytokine levels in cynomolgus monkeys. *Toxicology.* 1995; 105(1):81-90. (Biology)
- Wilson AD, Shoostari M, Finerty S, Watkins P, Morgan AJ. Selection of monoclonal antibodies for the identification of lymphocyte surface antigens in the New World primate *Saguinus oedipus oedipus* (cotton top tamarin). *J Immunol Methods.* 1995; 178(2):195-200. (Biology)