

Technical Data Sheet

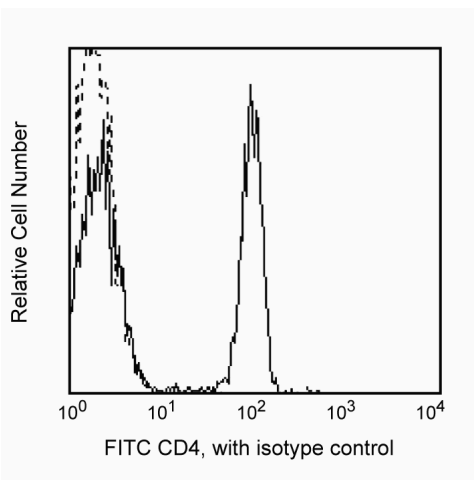
FITC Mouse Anti-Human CD4

Product Information

Material Number:	561005
Size:	25 tests
Vol. per Test:	20 µl
Clone:	RPA-T4
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	IV T114
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The RPA-T4 monoclonal antibody specifically binds to CD4, a 59 kDa single-chain transmembrane glycoprotein that is expressed on T-helper/inducer cell populations. CD4 is also expressed on thymocytes subsets and at lower levels on monocytes and macrophages. CD4 functions as a co-receptor in MHC class II-restricted antigen-induced T cell activation and as a receptor for human immunodeficiency viruses (HIV). This antibody binds to the D1 domain (CDR1 and CDR3 epitopes) of the CD4 antigen and reacts with approximately 80% of thymocytes and 45% of peripheral blood lymphocytes. CD4 is also present in low density on peripheral blood monocytes. RPA-T4 is capable of blocking HIV-1, gp120, and inhibits syncytium formation.



Profile of peripheral blood lymphocytes analyzed on a FACScan (BDIS, San Jose, CA)

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.
The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
555748	FITC Mouse IgG1, κ Isotype Control	100 tests	MOPC-21

Product Notices

- 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).
- Source of all serum proteins is from USDA inspected abattoirs located in the United States.
- 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.
- Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

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References

- Knapp W, Dorken B, Rieber EP, et al, ed. *Leucocyte Typing IV*. New York: Oxford University Press; 1989:1-1208. (Biology)
- Schlossman S, Boumell L, et al, ed. *Leucocyte Typing V*. New York: Oxford University Press; 1995. (Biology)