

Technical Data Sheet

PE Rat Anti-Mouse CD4

Product Information

Material Number:	553653
Alternate Name:	L3T4
Size:	0.2 mg
Concentration:	0.2 mg/ml
Clone:	H129.19
Immunogen:	A.TH mouse CTL clone A15.1.17
Isotype:	Rat (LOU) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The H129.19 antibody reacts with the CD4 (L3T4) differentiation antigen expressed on thymocytes, a subpopulation of mature T lymphocytes (i.e., MHC class II-restricted T cells, including most T helper cells), and a subset of NK-T cells of all mouse strains tested. CD4 has also been detected on pluripotent hematopoietic stem cells, bone marrow myeloid precursors, intrathymic lymphoid precursors, and a subset of splenic dendritic cells. CD4 is expressed on the plasma membrane of mouse egg cells and is involved in adhesion of the egg to MHC class II-bearing sperm. CD4 is an antigen coreceptor on the T-cell surface which interacts with MHC class II molecules on antigen-presenting cells. It participates in T-cell activation through its association with the T-cell receptor complex and protein tyrosine lck. H129.19 mAb blocks binding of the anti-mouse CD4 mAbs Gk1.5 (Cat. No. 557307/553729) and RM4-5 (Cat. No. 553046/553047), but not RM4-4 (Cat. No. 553055) antibody. mAb H129.19 inhibits various responses of T helper cells to antigenic or mitogenic stimuli.

Preparation and Storage

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

The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

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
553930	PE Rat IgG2a, κ Isotype Control	0.1 mg	R35-95

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. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
4. 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.

References

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Pierres A, Naquet P, Van Agthoven A, et al. A rat anti-mouse T4 monoclonal antibody (H129.19) inhibits the proliferation of Ia-reactive T cell clones and delineates two phenotypically distinct (T4+, Lyt-2,3-, and T4-, Lyt-2,3+) subsets among anti-Ia cytolytic T cell clones. *J Immunol.* 1984; 132(6):2775-2782. (Immunogen: Blocking, Immunoprecipitation)

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