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Datasheet for 200-308-N18

CD4 Phycoerythrin Antibody

Overview

Description:	Anti-CD4 (MOUSE) Phycoerythrin Conjugated Monoclonal Antibody - 200-308-N18
Item No.:	200-308-N18
Size:	500 µL
Applications:	FC
Reactivity:	Human
Host Species:	Mouse

Product Details

Background:	The Anti-CD-4 antibody (OKT4) reacts with human CD4, a 59 kDa protein which acts as a co-receptor for the T cell receptor (TCR) in its interaction with MHC Class II molecules on antigen-presenting cells. The extracellular domain of CD4 binds to the beta-2 domain of MHC Class II, while its cytoplasmic tail provides a binding site for the tyrosine kinase lck, facilitating the signaling cascade that initiates T cell activation. CD4, and co-receptors CCR5 and CXCR4, may also be utilized by HIV-1 to enter T cells. Human CD4 is typically expressed on thymocytes, some mature T cell populations such as Th17 and T regulatory (Treg) cells, as well as on dendritic cells. The OKT4 antibody is widely used as a phenotypic marker for CD4 expression.
Synonyms:	T-cell surface glycoprotein CD4, T-cell surface antigen T4/Leu-3, CD4, FITC anti-human CD4, RPA-T4, PE, T4
Host Species:	Mouse
Conjugate:	R-Phycoerythrin (RPE)
Clonality:	Monoclonal
Clone ID:	OKT4
Format:	IgG2b
F/P Ratio:	1-2

Target Details

Gene Name:	CD4

Reactivity:	Human
Immunogen:	Anti-CD4 Antibody (Monoclonal) was produced by repeated immunizations with CD4 antigen.
Purity/Specificity:	Phycoerythrin conjugated CD4 Monoclonal Antibody was purified from tissue culture supernatant via affinity chromatography and is directed against human CD4. Reactivity is observed against human CD4, Cynomolgus, Rhesus, and chimpanzee. This antibody recognizes a different epitope, and thus does not block binding of clone RPA-T4. Cross reactivity with CD4 from other sources has not been tested. Anti-CD4 is conjugated with PE under optimal conditions and the solution is free of unconjugated PE.
Relevant Links:	• UniProtKB - P01730 • NCBI - NP_000607.1 • GeneID - 920

Application Details

Tested Applications:	FC
Application Note:	Anti-CD4 is tested for Flow Cytometry and is useful for Immunoprecipitation, Immunofluorescence, and Immunohistochemistry. Researchers should determine optimal titers for applications that are not stated.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
FC:	5µL/test/1x10e5 to 1x10e8 cells
IF:	User Optimized
IHC:	User Optimized
IP:	User Optimized
WB:	User Optimized

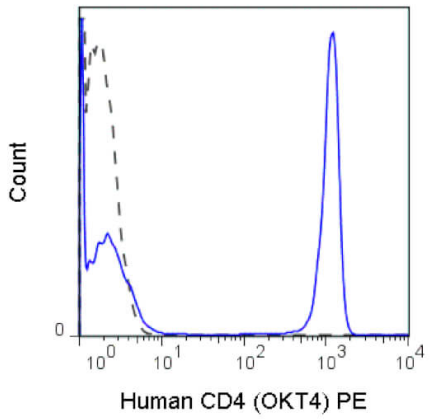
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	5ul/test Each neat
Buffer:	0.01 M Sodium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.09% (w/v) Sodium Azide
Stabilizer:	0.1% Gelatin

Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vial at 4° C prior to opening. Dilute only prior to immediate use. This product is stable at 4° C as an undiluted liquid. Use subdued lighting during handling and incubation of cells prior to analysis. Store reagent in the dark. DO NOT FREEZE.
Expiration:	Expiration date is six (6) months from date of receipt.

Images



Flow Cytometry
Flow Cytometry of Mouse anti-CD4 Phycoerythrin Conjugated Monoclonal Antibody. Cells: human peripheral blood lymphocytes. Stimulation: none. Antibody: (GRAY) 0.06 µg PE Mouse IgG2b isotype control; (BLUE) Phycoerythrin Anti-CD4 mouse antibody using 5 uL (0.06 ug).

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.