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Datasheet for 200-308-N18

# CD4 Phycoerythrin Antibody

## Overview

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| **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

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| **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

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| **Gene Name:** | CD4 |

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| **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<br>• NCBI - NP_000607.1<br>• GeneID - 920 |

## Application Details

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| **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

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| **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

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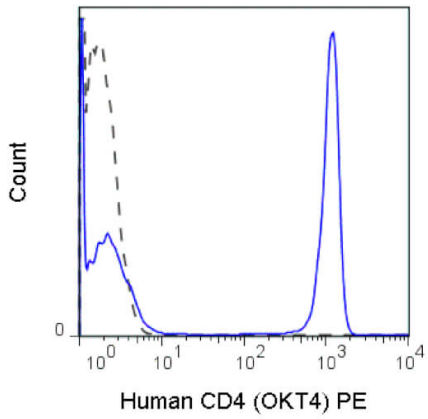
| **Shipping Condition:** | Wet Ice |
| **Storage Condition:** | Store vial at 4° C prior to opening. Dilute only prior to immediate use. This product is stable at 4° C as an undiluted liquid. Use subdued lighting during handling and incubation of cells prior to analysis. Store reagent in the dark. DO 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

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