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Datasheet for 200-326-N66

# CD28 Allophycocyanin Antibody

## Overview

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| **Description:** | Anti-CD28 (MOUSE) Allophycocyanin Conjugated Monoclonal Antibody - 200-326-N66 |
| **Item No.:** | 200-326-N66 |
| **Size:** | 500 µL |
| **Applications:** | FC |
| **Reactivity:** | Human |
| **Host Species:** | Mouse |

## Product Details

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| **Background:** | The CD28 antibody reacts with human CD28, a 44 kDa type I surface glycoprotein which acts as a co-stimulatory receptor in support of the T cell receptor (TCR). CD28 exists as a homodimer with specificity for two known ligands, known as B7-1 (CD80) and B7-2 (CD86), which are expressed on activated B cells and antigen-presenting cells. These ligands trigger CD28 signaling in concert with TCR activation to drive T cell proliferation, induce high-level expression of IL-2, impart resistance to apoptosis, and enhance T cell cytotoxicity. The interaction / co-stimulatory signaling between the B7 ligands and CD28 provides crucial communication between T cells and B cells or APCs to coordinate the adaptive immune response. Other members of the CD28 family of receptors include CTLA-4 (CD152), PD-1 (CD279), ICOS and BTLA. The CD28.2 antibody may be used as a phenotypic marker for human CD28, expressed on all CD4+ T cells and CD8+ T cells, and is widely used as a reagent for activation of the CD28 receptor in vitro and in vivo. |
| **Synonyms:** | T-cell-specific surface glycoprotein CD28, TP44, CD28 |
| **Host Species:** | Mouse |
| **Conjugate:** | Allophycocyanine (APC) |
| **Clonality:** | Monoclonal |
| **Clone ID:** | CD28.2 |
| **Format:** | IgG1 |
| **F/P Ratio:** | 1-2 |

## Target Details

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| **Gene Name:** | CD28 |
| **Reactivity:** | Human |
| **Immunogen:** | Anti-CD28 Antibody (Monoclonal) was produced by repeated immunizations with CD28 antigen. |
| **Purity/Specificity:** | Allophycocyanin conjugated CD28 Monoclonal Antibody was purified from tissue culture supernatant via affinity chromatography and is directed against human CD28. Reactivity is observed against human CD28, Baboon, Chimpanzee, Cynomolgus, and Rhesus. Cross reactivity with CD28 from other sources has not been tested. Anti-CD28 is conjugated with APC under optimal conditions and the solution is free of unconjugated APC. |
| **Relevant Links:** | • UniProtKB - P10747<br>• NCBI - NP_001230006.1<br>• GeneID - 940 |

## Application Details

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| **Tested Applications:** | FC |
| **Application Note:** | Anti-CD28 is tested for Flow Cytometry and is useful in Immunoprecipitation 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 |
| **IHC:** | User Optimized |
| **IP:** | User Optimized |

## Formulation

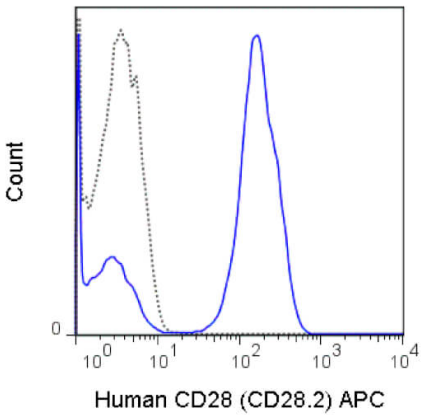
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| **Physical State:** | Liquid (sterile filtered) |
| **Concentration:** | 0.05 mg/mL Sufficient to run approximately 100 tests |
| **Buffer:** | 0.01 M Sodium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| **Preservative:** | 0.09% (w/v) Sodium Azide |
| **Stabilizer:** | 0.1% Gelatin |

## Shipping & Handling

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| **Shipping Condition:** | Wet Ice |

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| **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-CD28 Allophycocyanin Conjugated Monoclonal Antibody. Cells: human peripheral blood lymphocytes. Stimulation: none. Antibody: (Dotted Line) APC Mouse IgG1 isotype control (0.25µg); (BLUE) Allophycocyanin Anti-CD28 mouse antibody using 5 µL (0.25µg).

## Disclaimer

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