

Datasheet for 200-308-N66**CD28 Phycoerythrin Antibody****Overview**

Description:	Anti-CD28 (MOUSE) Phycoerythrin Conjugated Monoclonal Antibody - 200-308-N66
Item No.:	200-308-N66
Size:	500 µL
Applications:	FC
Reactivity:	Human
Host Species:	Mouse

Product Details

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:	R-Phycoerythrin (RPE)
Clonality:	Monoclonal
Clone ID:	CD28.2
Format:	IgG1
F/P Ratio:	1-2

Target Details

Gene Name:	CD28
Reactivity:	Human
Immunogen:	Anti-CD28 Antibody (Monoclonal) was produced by repeated immunizations with CD28 antigen.
Purity/Specificity:	Phycoerythrin 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 PE under optimal conditions and the solution is free of unconjugated PE.
Relevant Links:	• UniProtKB - P10747 • NCBI - NP_001230006.1 • GeneID - 940

Application Details

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

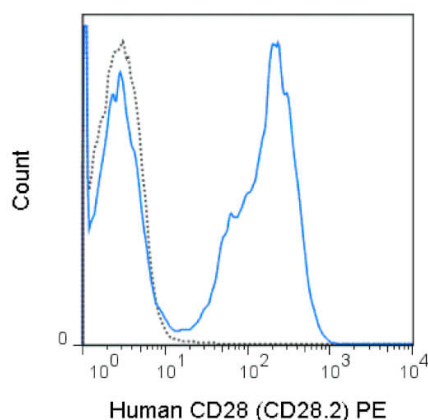
Physical State:	Liquid (sterile filtered)
Concentration:	0.05 mg/mL Sufficient to run approximately 100 tests
Buffer:	0.01 M Sodium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.09% (w/v) Sodium Azide
Stabilizer:	0.1% Gelatin

Shipping & Handling

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 Phycoerythrin Conjugated Monoclonal Antibody. Cells: human peripheral blood lymphocytes. Stimulation: none. Antibody: (Dotted Line) PE Mouse IgG1 kappa isotype control; (BLUE) Phycoerythrin Anti-CD28 mouse antibody using 5 ul.

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.