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Datasheet for 200-308-M62

CD3 Phycoerythrin Antibody

Overview

Description:	Anti-CD3 (MOUSE) Phycoerythrin Conjugated Monoclonal Antibody - 200-308-M62
Item No.:	200-308-M62
Size:	500 µL
Applications:	FC
Reactivity:	Human
Host Species:	Mouse

Product Details

Background:	CD3 (T3), a complex T cell marker, is known to associate noncovalently with the a/b or g/z heterodimer of the T cell antigen receptor (TCR) to form the most complex transmembrane (TM) receptor structures. Structurally, CD3 consists of four distinct membrane glycoprotein isoforms (CD3g, CD3e, CD3s and the zeta chain) to generate activation signals. CD3 is specially engaged in antigen recognition and is known to play an important role in mediating signals that are critical for T cell development in the thymus, proliferation, and induction of T cell-mediated immune responses against infectious agents and also in the differentiation of T cells into effector and memory populations. CD3 usually expresses in the cytoplasm of prothymocytes, and on the surface of about 95% of thymocytes, but cytoplasmic CD3 is lost as the cells differentiate into medullary thymocytes. Apart from its role as an important marker in the classification of malignant lymphomas and lymphoid leukaemia, CD3 can also be useful for the identification of T cells in celiac disease, lymphocytic colitis and colorectal carcinomas associated with loss of a mismatch repair protein. CD3 indirectly plays an important role in immunomodulation whereas the anti-CD3 antibody may be used in in vitro Treg assays to generate effector T cells.
Synonyms:	T-cell surface glycoprotein CD3 epsilon chain, T-cell surface antigen T3/Leu-4 epsilon chain, CD3e
Host Species:	Mouse
Conjugate:	R-Phycoerythrin (RPE)
Clonality:	Monoclonal
Clone ID:	OKT3
Format:	IgG2a

F/P Ratio:	1-2

Target Details

Gene Name:	CD3e
Reactivity:	Human
Immunogen:	Anti-CD3 Antibody (Monoclonal) was produced by repeated immunizations with CD3 antigen.
Purity/Specificity:	Phycoerythrin conjugated CD3 Monoclonal Antibody was Protein G Purified and is directed against human CD3. Reactivity is observed against human CD3 and chimpanzee. Cross reactivity with CD3 from other sources has not been tested.
Relevant Links:	• UniProtKB - P07766 • NCBI - NP_000724.1 • GeneID - 916

Application Details

Tested Applications:	FC
Application Note:	Anti-CD3 is tested for Flow Cytometry (Cell Surface). 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:	10 µL/1x10^6 cells

Formulation

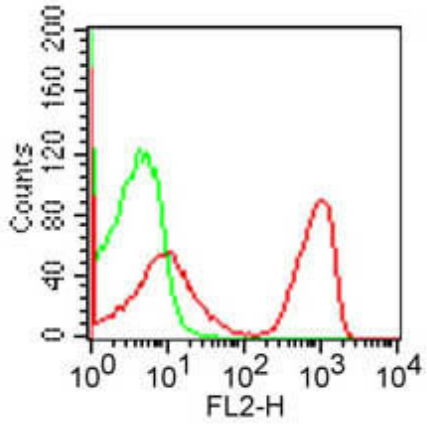
Physical State:	Liquid (sterile filtered)
Concentration:	0.1 mg/mL Sufficient to run approximately 100 tests
Buffer:	0.01 M Sodium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.09% (w/v) Sodium Azide
Stabilizer:	0.1% Gelatin

Shipping & Handling

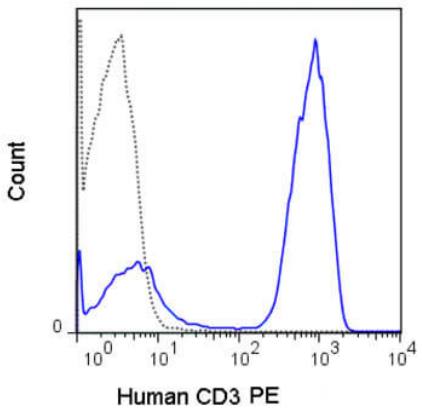
Shipping Condition:	Wet Ice

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
Cell Surface Flow Cytometry of Mouse anti-HUMAN CD3 antibody Phycoerythrin conjugated. Cells: 10^6 human PBMC. Propidium iodide negative lymphocyte population gated for analysis. Stimulation: none. Antibody: (GREEN) isotype control antibody; (RED) Phycoerythrin Anti-CD3 mouse secondary antibody using 10 ul (0.1 ug).



Flow Cytometry
Flow Cytometry of Mouse anti-HUMAN CD3 antibody Phycoerythrin conjugated. Cells: 10^6 Human peripheral blood lymphocytes. Stimulation: none. Antibody: (GRAY) 0.5 ug PE Mouse IgG2a isotype control; (BLUE) Phycoerythrin Anti-CD3 mouse secondary antibody using 5 ul (0.5 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.