

**Datasheet for 200-308-N68****CD45 Phycoerythrin Antibody****Overview**

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|----------------------|------------------------------------------------------------------------------|
| <b>Description:</b>  | Anti-CD45 (MOUSE) Phycoerythrin Conjugated Monoclonal Antibody - 200-308-N68 |
| <b>Item No.:</b>     | 200-308-N68                                                                  |
| <b>Size:</b>         | 500 µL                                                                       |
| <b>Applications:</b> | FC                                                                           |
| <b>Reactivity:</b>   | Human                                                                        |
| <b>Host Species:</b> | Mouse                                                                        |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| <b>Background:</b>   | CD45 is a 180-240 kD single chain type I membrane glycoprotein also known as leukocyte common antigen (LCA) and T200. It is a tyrosine phosphatase expressed on the plasma membrane of all hematopoietic cells, except erythrocytes and platelets. CD45 is a signaling molecule that regulates a variety of cellular processes including cell growth, differentiation, cell cycle, and oncogenic transformation. CD45 plays a critical role in T and B cell antigen receptor-mediated activation by dephosphorylating substrates including p56Lck, p59Fyn, and other Src family kinases. CD45 non-covalently associates with lymphocyte phosphatase-associated phosphoprotein (LPAP) on T and B lymphocytes. CD45 has been reported to bind galectin-1 and to be associated with several other cell surface antigens including CD1, CD2, CD3, and CD4. |
| <b>Synonyms:</b>     | Receptor-type tyrosine-protein phosphatase C, Leukocyte common antigen, CD45, PTPRC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Host Species:</b> | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Conjugate:</b>    | R-Phycoerythrin (RPE)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Clonality:</b>    | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Clone ID:</b>     | HI30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Format:</b>       | IgG1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>F/P Ratio:</b>    | 1-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

**Target Details**

|                   |       |
|-------------------|-------|
| <b>Gene Name:</b> | PTPRC |
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| <b>Reactivity:</b>         | Human                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Immunogen:</b>          | Anti-CD45 Antibody (Monoclonal) was produced by repeated immunizations with CD45 antigen.                                                                                                                                                                                                                                                                                                                                  |
| <b>Purity/Specificity:</b> | Phycoerythrin conjugated CD45 Monoclonal Antibody was purified from tissue culture supernatant via affinity chromatography and is directed against human CD45. Reactivity is observed against human CD45. Cross reactivity is observed with Chimpanzee. Reactivity with CD45 from other sources has not been tested. Anti-CD45 is conjugated with PE under optimal conditions and the solution is free of unconjugated PE. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">UniProtKB - P08575</a></li><li>• <a href="#">NCBI - NP_002829.3</a></li><li>• <a href="#">GeneID - 5788</a></li></ul>                                                                                                                                                                                                                                                  |

## Application Details

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|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b> | FC                                                                                                                                                                                    |
| <b>Application Note:</b>    | Anti-CD45 is tested for Flow Cytometry and is useful for Immunohistochemistry and Western Blotting. Researchers should determine optimal titers for applications that are not stated. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                       |
| <b>FC:</b>                  | 5 uL/test/1x10e5 to 1x10e8 cells                                                                                                                                                      |
| <b>IHC:</b>                 | User Optimized                                                                                                                                                                        |
| <b>WB:</b>                  | User Optimized                                                                                                                                                                        |

## Formulation

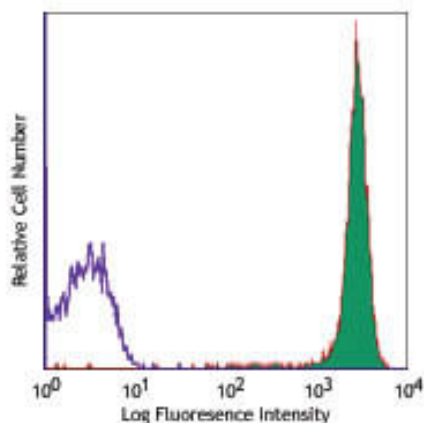
|                        |                                                            |
|------------------------|------------------------------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)                                  |
| <b>Buffer:</b>         | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| <b>Preservative:</b>   | 0.09% (w/v) Sodium Azide                                   |
| <b>Stabilizer:</b>     | 0.2% BSA (w/v)                                             |

## Shipping & Handling

|                            |                                                                                                                                                                                                                                                           |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Shipping Condition:</b> | Wet Ice                                                                                                                                                                                                                                                   |
| <b>Storage Condition:</b>  | 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-CD45 Phycoerythrin Conjugated Monoclonal Antibody. Cells: human peripheral blood lymphocytes. Stimulation: none. Antibody: (Blue) PE Mouse IgG1 isotype control; (Green) Phycoerythrin Anti-CD45 mouse antibody using 5  $\mu$ l.

## 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.