

Technical Data Sheet

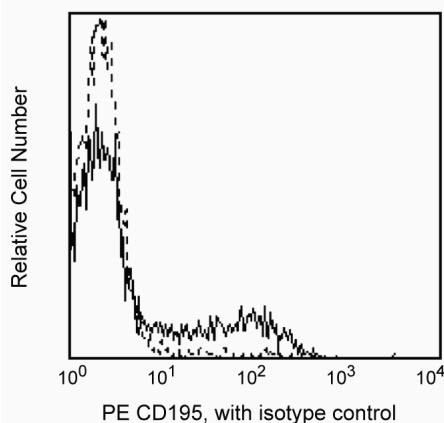
PE Mouse Anti-Human CD195

Product Information

| | |
|-------------------------|---|
| Material Number: | 560932 |
| Alternate Name: | CCR-5; Chemokine (C-C motif) receptor 5; CMKBR5; CKR5; CKR-5; CHEMR13 |
| Size: | 25 Tests |
| Vol. per Test: | 20 µl |
| Clone: | 3A9 |
| Immunogen: | Human CCR5 Transfected Cell Line |
| Isotype: | Mouse (C57BL/6) IgG2a, κ |
| Reactivity: | QC Testing: Human Tested in Development: Rhesus, Cynomolgus |
| Workshop: | VII 70309 |
| Storage Buffer: | Aqueous buffered solution containing BSA and ≤0.09% sodium azide. |

Description

The 3A9 monoclonal antibody recognizes CD195, which is also known as the chemokine receptor, CCR5, a seven transmembrane-spanning G protein-associated molecule. The 3A9 antibody also reportedly cross-reacts with human CCR8. Results of epitope mapping and sequence comparison between CCR5 and CCR8 reveals that the first three amino acid residues for these two receptors are identical: MDY (Met-Asp-Tyr). CCR5 belongs to the β-chemokine receptor family. It is expressed on subsets of T lymphocytes, NK cells, monocytes, macrophages, and dendritic cells. CCR5 regulates lymphocyte chemotaxis activation and transendothelial migration during inflammation. It signals a response to at least three chemokines: RANTES and macrophage inflammatory protein-1 (MIP-1) α and β. Additionally, CCR5 has been found to be a co-receptor for macrophage-tropic HIV-1 on CD4+ cells, a characteristic that is important in viral transmission. Reports indicate that individuals who have partial (heterozygous) or complete (homozygous) deletion of the CCR5 allele, demonstrate resistance to HIV infection. CCR5 has been clustered as CD195 in the VIIth HLDA workshop.



Flow cytometric analysis of CD195 expression on human peripheral blood lymphocytes. Whole blood was stained with either PE Mouse IgG2a, κ Isotype Control (Cat. No. 555574; dashed line histogram) or PE Mouse Anti-Human CD195 (Cat. No. 556042/560932/550632; solid line histogram). Erythrocytes were lysed with BD FACS™ Lysing Solution (Cat. No. 349202). Fluorescent histograms were derived from gated events with the side and forward light-scatter characteristics of viable lymphocytes.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

Application Notes

Application

Flow cytometry

Routinely Tested

Recommended Assay Procedure:

Immunophenotyping studies of chemokine receptors need to be performed on freshly collected whole blood (<24 Hrs). Incubation with the antibody should be done at room temperature in the dark. Cellular manipulation, such as Ficoll™ separation, freezing, or exposure to cold temperatures prior to staining have been shown to cause a decrease in staining intensity and inconsistent results.

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560932 Rev. 2



Suggested Companion Products

| <u>Catalog Number</u> | <u>Name</u> | <u>Size</u> | <u>Clone</u> |
|-----------------------|--|-------------|--------------|
| 555574 | PE Mouse IgG2a, κ Isotype Control | 100 Tests | G155-178 |
| 550632 | PE Mouse Anti-Human CD195 | 50 Tests | 3A9 |
| 556042 | PE Mouse Anti-Human CD195 | 100 Tests | 3A9 |
| 554656 | Stain Buffer (FBS) | 500 mL | (none) |
| 554657 | Stain Buffer (BSA) | 500 mL | (none) |
| 349202 | BD FACS™ Lysing Solution | 100 mL | (none) |
| 555899 | Lysing Buffer | 100 mL | (none) |

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1×10^6 cells in a 100- μ l experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at wwwbdbiosciences.com/colors.
6. Species testing during development may have been performed with a different format of the same clone. Selected applications have been tested for cross-reactivity.
7. Ficoll-Paque is a trademark of Amersham Biosciences Limited.
8. Please refer to wwwbdbiosciences.com/pharming/protocols for technical protocols.

References

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