Technical Data Sheet

# BUV395 Mouse Anti-Human CD35

## Product Information

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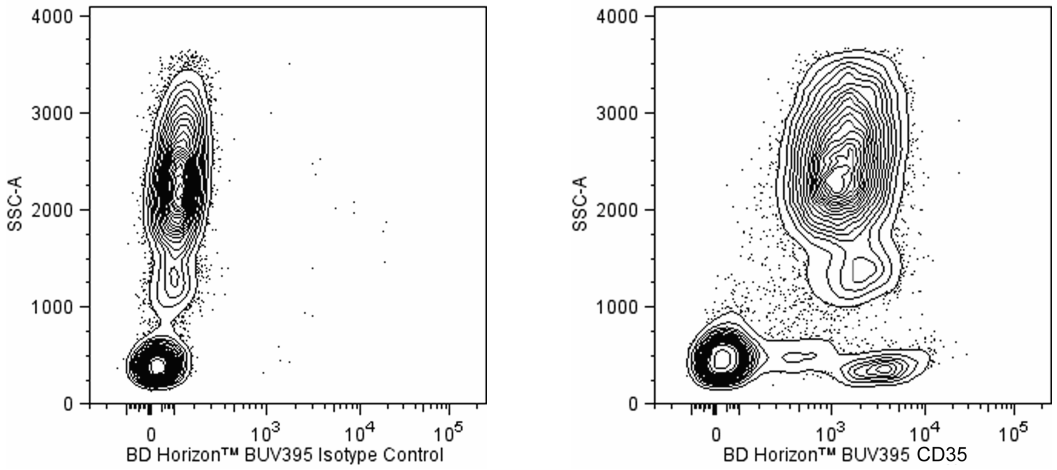
|---|---|
| **Material Number:** | **565328** |
| **Alternate Name:** | CR1; Complement receptor type 1; C3b/C4b receptor; C3BR; C4BR; KN |
| **Size:** | 50 Tests |
| **Vol. per Test:** | 5 µl |
| **Clone:** | E11 |
| **Immunogen:** | Human Cells of the Monocyte Lineage |
| **Isotype:** | Mouse IgG1, κ |
| **Reactivity:** | QC Testing: Human<br>Reported Reactivity: Rhesus, Cynomolgus, Baboon |
| **Workshop:** | III 204 |
| **Storage Buffer:** | Aqueous buffered solution containing BSA and ≤0.09% sodium azide. |

## Description

The E11 monoclonal antibody specifically binds to CD35. CD35 is also known as Complement receptor type 1 (CR1), C3b/C4b receptor, C3BR, C4BR, Immune adherence receptor, or KN. CD35 is a type I transmembrane glycoprotein that exists in four allelic forms of 160, 190, 220 and 250 kDa. CD35 serves as a receptor for complement fragments C3b, iC3b, C3dg, C4b, iC3, and iC4. It enhances phagocytosis by neutrophils and monocytes and regulates complement activation. It is expressed on erythrocytes, granulocytes, monocytes, B cells, and some dendritic cells, T cells, and NK cells. It binds complement components C3b and C4b, mediating. This antibody cannot inhibit the phagocytic capacity of granulocytes. The CD35 antibody is useful in studies of cells that express complement receptors.

The antibody was conjugated to BD Horizon BUV395 which has been exclusively developed by BD Biosciences as an optimal dye for use on a 355 nm laser equipped instrument. With an Ex Max at 348 nm and an Em Max at 395 nm, this dye has virtually no spillover into any other detector. BD Horizon BUV395 can be excited with a 355 nm laser and detected with a 379/28 filter.




***Multiparameter flow cytometric analysis of CD35 expression on human peripheral blood leucocytes.*** *Human whole blood was stained with either BD Horizon™ BUV395 Mouse IgG1, κ Isotype Control (Cat. No. 563547; Left Panel) or BD Horizon BUV395 Mouse Anti-Human CD35 antibody (Cat. No. 565328; Right Panel). The erythrocytes were lysed with BD FACS™ Lysing Solution (Cat. No.349202). Two-parameter flow cytometric contour plots showing the correlated expression of CD35 (or Ig Isotype control staining) versus side light-scatter (SSC) signals were derived from gated events with the forward and side light-scatter characteristics of intact leucocyte populations. Flow cytometric analysis was performed using a BD™ LSR II Flow Cytometer System.*

## 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 BD Horizon™ BUV395 under optimum conditions, and unconjugated antibody and free BD Horizon™ BUV395 were removed.

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## Application Notes

**Application**

| | |
|---|---|
| Flow cytometry | Routinely Tested |

## Suggested Companion Products

| Catalog Number | Name | Size | Clone |
|---|---|---|---|
| 554656 | Stain Buffer (FBS) | 500 mL | (none) |
| 554657 | Stain Buffer (BSA) | 500 mL | (none) |
| 563547 | BUV395 Mouse IgG1, k Isotype Control | 50 µg | X40 |
| 349202 | BD FACS™ Lysing Solution | 100 mL | (none) |
| 555899 | Lysing Buffer | 100 mL | (none) |
| 563794 | Brilliant Stain Buffer | 5 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-µl experimental sample (a test).
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. 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.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
5. An isotype control should be used at the same concentration as the antibody of interest.
6. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

## References


Barclay NA, Brown MH, Birkeland ML, et al, ed. *The Leukocyte Antigen FactsBook.* San Diego, CA: Academic Press; 1997. (Biology)

Dougherty GJ, Selvendran Y, Murdoch S, Palmer DG, Hogg N. The human mononuclear phagocyte high-affinity Fc receptor, FcRI, defined by a monoclonal antibody, 10.1. *Eur J Immunol.* 1987; 17(10):1453-1459. (Biology)

Hogg N, Ross GD, Jones DB, Slusarenko M, Walport MJ, Lachmann PJ. Identification of an anti-monocyte monoclonal antibody that is specific for membrane complement receptor type one (CR1). *Eur J Immunol.* 1984; 14(3):236-243. (Immunogen: Blocking, Fluorescence microscopy, Functional assay, Immunofluorescence, Immunohistochemistry, Immunoprecipitation, Inhibition, Radioimmunoassay)

Lin G-X, Yang X, Hollemweguer E, Yu J-F, Li L, Wu X-W, Ward T, Chen Z. Cross-reactivity of CD antibodies in eight animal species. In: Mason D, Andre P, Benussan A, et al, ed. *Leucocyte Typing VII: White Cell Differentiation Antigens.* New York: Oxford University Press; 2002:519-523. (Clone-specific: Flow cytometry)

Nickells M, Hauhart R, Krych M, Subramanian VB, Geoghegan-Barek K, Marsh HC, Jr., Atkinson JP. Mapping epitopes for 20 monoclonal antibodies to CR1. *Clin Exp Immunol.* 1998; 112(1):27-33. (Clone-specific: Dot Blot, ELISA)

Schlossman SF, Boumsell L, Gilks W, et al, ed. *Leucocyte Typing V.* New York: Oxford University Press; 1995. (Biology)



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