

Technical Data Sheet

BV421 Mouse Anti-Human CD2

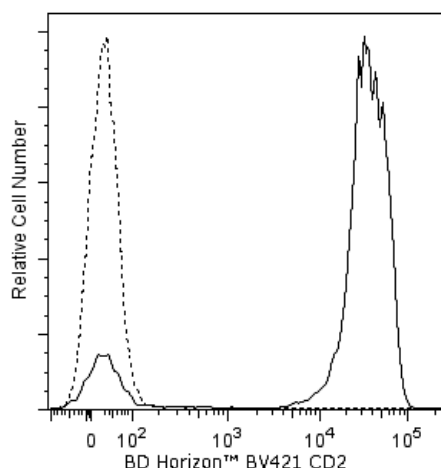
Product Information

Material Number:	562639
Alternate Name:	LFA-2; Lymphocyte function antigen-2; T11/Leu-5; Rosette receptor
Size:	100 tests
Vol. per Test:	5 µl
Clone:	RPA-2.10
Immunogen:	Human Phytohemagglutinin-treated Lymphoblasts
Isotype:	Mouse (BALB/c) IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	IV T085
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The RPA-2.10 monoclonal antibody specifically binds to CD2. CD2 is a 50 kDa single-chain transmembrane glycoprotein, also known as LFA-2 or the receptor for sheep erythrocytes. CD2 belongs to the immunoglobulin superfamily of proteins along with its ligand LFA-3, CD58. It is present on about 80-90% of human peripheral blood lymphocytes, greater than 95% of thymocytes, all T lymphocytes that form E-rosettes and a subset of NK cells. CD2 plays a role in T-cell signaling and in lymphocyte adhesion.

The antibody was conjugated to BD Horizon™ BV421 which is part of the BD Horizon™ Brilliant Violet™ family of dyes. With an Ex Max of 407-nm and Em Max at 421-nm, BD Horizon™ BV421 can be excited by the violet laser and detected in the standard Pacific Blue™ filter set (eg, 450/50-nm filter). BD Horizon™ BV421 conjugates are very bright, often exhibiting a 10 fold improvement in brightness compared to Pacific Blue™ conjugates.



Flow cytometric analysis of CD2 expression on human peripheral blood lymphocytes. Whole blood was stained with BD Horizon™ BV421 Mouse Anti-Human CD2 antibody (Cat. No. 562639/562667; solid line histogram) or with a BD Horizon™ BV421 Mouse IgG1, κ Isotype Control (Cat. No. 562438; dashed line histogram). Erythrocytes were lysed with BD Pharm Lyse™ Lysing Buffer (Cat. No. 555899). The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of viable lymphocytes. Flow cytometry 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™ BV421 under optimum conditions, and unconjugated antibody and free BD Horizon™ BV421 were removed.

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
562438	BV421 Mouse IgG1, κ Isotype Control	50 µg	X40
555899	Lysing Buffer	100 ml	(none)
554656	Stain Buffer (FBS)	500 ml	(none)
562667	BV421 Mouse Anti-Human CD2	25 tests	RPA-2.10

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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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
3. An isotype control should be used at the same concentration as the antibody of interest.
4. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
5. 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.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
7. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.
8. Brilliant Violet™ 421 is a trademark of Sirigen.

References

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Suranyi MG, Bishop GA, Clayberger C, Krensky AM, Leenaerts P, Aversa G, Hall BM. Lymphocyte adhesion molecules in T cell-mediated lysis of human kidney cells. *Kidney Int.* 1991; 39(2):312-319. (Clone-specific: Flow cytometry, Inhibition)

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