Technical Data Sheet

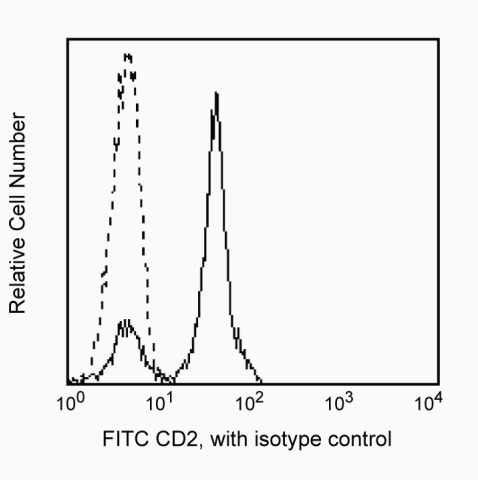
FITC Mouse Anti-Human CD2

Product Information

Material Number:	**561759**
Alternate Name:	LFA-2; Lymphocyte function antigen-2; T11/Leu-5; Rosette receptor
Size:	25 Tests
Vol. per Test:	20 µl
Clone:	RPA-2.10
Immunogen:	Human Phytohemagglutinin-treated Lymphoblasts
Isotype:	Mouse (BALB/c) IgG1, κ
Reactivity:	QC Testing: Human Tested in Development: Rhesus, Cynomolgus, Baboon
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.



Flow cytometric analysis of CD2 expression on human peripheral blood lymphocytes. *Whole blood was stained with either FITC Mouse IgG1, κ Isotype Control (Cat. No. 555748; dashed line histogram) or FITC Mouse Anti-Human CD2 antibody (Cat. No. 555326/561759/556608; solid line histogram). Erythrocytes were lysed with BD FACS™ Lysing Solution (Cat. No. 349202). The fluorescence histograms showing CD2 expression (or Ig Isotype control staining) were derived from gated events with the forward and side light-scatter characteristics of intact lymphocytes. Flow cytometry was performed on a BD FACScan™ 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 FITC under optimum conditions, and unreacted FITC was removed.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
555748	FITC Mouse IgG1, κ Isotype Control	100 Tests	MOPC-21
554656	Stain Buffer (FBS)	500 mL	(none)
349202	BD FACS™ Lysing Solution	100 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)
555899	Lysing Buffer	100 mL	(none)
555326	FITC Mouse Anti-Human CD2	100 Tests	RPA-2.10
556608	FITC Mouse Anti-Human CD2	50 Tests	RPA-2.10

BD Biosciences
bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	866.979.9408	32.2.400.98.95	0120.8555.90	65.6861.0633	55.11.5185.9995

For country contact information, visit **bdbiosciences.com/contact**

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. 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 www.bdbiosciences.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. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Aversa GG, Bishop GA, Suranyi MG, Hall BM. RPA-2.10: an anti-CD2 monoclonal antibody that inhibits alloimmune responses and monitors T cell activation. *Transplant Proc.* 1987; 19(1):277-278. (Biology)

Kato K. CD2 Workshop Panel report. In: Kishimoto T. Tadamitsu Kishimoto .. et al., ed. *Leucocyte typing VI : white cell differentiation antigens : proceedings of the sixth international workshop and conference held in Kobe, Japan, 10-14 November 1996.* New York: Garland Pub.; 1997:39-43. (Biology)

Hahn WC, Burakoff SJ, Bierer BE. Signal transduction pathways involved in T cell receptor-induced regulation of CD2 avidity for CD58. *J Immunol.* 1993; 150(7):2607-2619. (Biology)

Knapp W. W. Knapp .. et al., ed. *Leucocyte typing IV : white cell differentiation antigens.* Oxford New York: Oxford University Press; 1989:1-1182. (Clone-specific)

Jonker M, Slingerland W. Reactivity of mAb specific for human CD markers with Rhesus monkey leucocytes. In: Knapp W. W. Knapp .. et al., ed. *Leucocyte typing IV : white cell differentiation antigens.* Oxford New York: Oxford University Press; 1989:1058-1063. (Biology)

Suranyi MG, Bishop GA, Clayberger C, et al. Lymphocyte adhesion molecules in T cell-mediated lysis of human kidney cells. *Kidney Int.* 1991; 39(2):312-319. (Biology)