Technical Data Sheet

BV750 Mouse Anti-Human CD2

Product Information

Material Number:	747173
Size:	50 µg
Clone:	RPA-2.10
Alternative Name:	LFA-2; LFA-3 receptor; SRBC; T-cell surface antigen T11/Leu-5; erythrocyte receptor
Reactivity:	Human (Tested in Development)
Isotype:	Mouse BALB/c IgG1, κ
Immunogen:	Human Phytohemagglutinin-treated Lymphoblasts
Application:	Flow cytometry (Qualified)
Concentration:	0.2 mg/ml
Workshop No.:	IV T085; VI 6T-078
Entrez Gene ID:	914
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.
Regulatory Status:	RUO

Description

The RPA-2.10 monoclonal antibody specifically binds to CD2 which is also known as Lymphocyte-function antigen-2 (LFA-2), LFA-3 receptor, Erythrocyte receptor, Sheep red blood cell (SRBC) receptor, or T-cell surface antigen T11/Leu-5. CD2 is a 50 kDa type I transmembrane glycoprotein. CD2 belongs to the immunoglobulin superfamily of proteins along with its primary ligand, LFA-3 (CD58). It is expressed on the surface of ~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 functions as an adhesion receptor that binds to CD58 resulting in the activation of CD2-positive T cells and NK cells and in the regulation of their cytolytic activities.

The antibody was conjugated to BD Horizon™ BV750 which is part of the BD Horizon Brilliant™ Violet family of dyes. This dye is a tandem fluorochrome of BD Horizon BV421 with an Ex Max of 405-nm and an acceptor dye with an Em Max at 750-nm. BD Horizon Brilliant BV750 can be excited by the violet laser (405 nm) and detected with a 750/30 nm filter with a 740 nm long pass. Due to spectral differences between labeled cells and beads, using BD™ CompBeads can result in incorrect spillover values when used with BD Horizon BV750 reagents. Therefore, the use of BD CompBeads or BD CompBeads Plus to determine spillover values for these reagents is not recommended.

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 BV750 under optimal conditions that minimize unconjugated dye and antibody.

Recommended Assay Procedure

For optimal and reproducible results, BD Horizon Brilliant Stain Buffer should be used anytime two or more BD Horizon Brilliant dyes (including BD OptiBuild Brilliant reagents) are used in the same experiment. Fluorescent dye interactions may cause staining artifacts which may affect data interpretation. The BD Horizon Brilliant Stain Buffer was designed to minimize these interactions. More information can be found in the Technical Data Sheet of the BD Horizon Brilliant Stain Buffer (Cat. No. 563794).

Suggested Companion Products

Catalog Number	Name	Size	Clone
566360	BV750 Mouse IgG1, κ Isotype Control	50 µg	X40
554656	Stain Buffer (FBS)	500 mL	
554657	Stain Buffer (BSA)	500 mL	
563794	Brilliant Stain Buffer	100 Tests	
555899	Lysing Buffer	100 mL	

349202	Lysing Solution 10X Concentrate	100 NA
564219	Human BD Fc Block™	50 mg

Product Notices

1. This antibody was developed for use in flow cytometry.
2. The production process underwent stringent testing and validation to assure that it generates a high-quality conjugate with consistent performance and specific binding activity. However, verification testing has not been performed on all conjugate lots.
3. Researchers should determine the optimal concentration of this reagent for their individual applications.
4. An isotype control should be used at the same concentration as the antibody of interest.
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. Please refer to www.bdbiosciences.com/us/s/resources for technical protocols.
8. BD Horizon Brilliant Stain Buffer is covered by one or more of the following US patents: 8,110,673; 8,158,444; 8,575,303; 8,354,239.
9. BD Horizon Brilliant™ Violet 750 is covered by one or more of the following US patents: 8,158,444; 8,802,450; 8,575,303; 8,455,613; 8,227,187; 8,841,072; 8,110,673.

References

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