

Technical Data Sheet

BUV737 Mouse Anti-Human CD79b**Product Information**

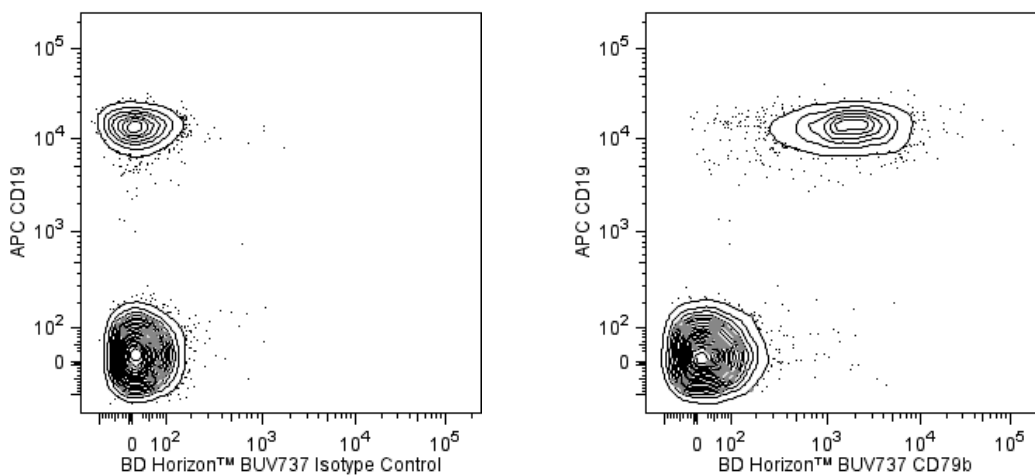
Material Number:	565297
Alternate Name:	Ig-beta; IGB; B29
Size:	50 Tests
Vol. per Test:	5 µl
Clone:	CB3-1
Immunogen:	Purified CD79αβ from Ramos B Cell Line
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	VI CD79.1
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

Immunoglobulin (Ig) antigen receptors are composed of a non-covalently-associated complex of Ig and two other proteins, Igα and Igβ, which have been designated in the Fifth International Leukocyte Workshop as CD79a and CD79b respectively. The CB3-1 monoclonal antibody specifically binds to CD79b, which is expressed on surface Ig (sIg)-positive lymphocytes and B-cell lines but only in the cytoplasm of sIg-negative cells including most terminal deoxynucleotidyl transferase (TdT) positive early pre-B and all cytoplasmic μ positive pre-B cell lines. Antibodies to CD79b are helpful in delineating signal transduction pathways activated via antibody receptors during different stages of B-cell differentiation.

The antibody was conjugated to BD Horizon BUV737 which is part of the BD Horizon Brilliant™ Ultraviolet family of dyes. This dye is a tandem fluorochrome of BD Horizon BUV395 with an Ex Max of 348-nm and an acceptor dye with an Em Max at 737-nm. BD Horizon Brilliant BUV737 can be excited by the ultraviolet laser (355 nm) and detected with a 740/35 filter. Due to the excitation of the acceptor dye by other laser lines, there may be significant spillover into channels detecting Alexa Fluor® 700-like dyes (e.g., 712/20-nm filter).

Due to spectral differences between labeled cells and beads, using BD™ CompBeads can result in incorrect spillover values when used with BD Horizon BUV737 reagents. Therefore, the use of BD CompBeads or BD CompBeads Plus to determine spillover values for these reagents is not recommended. Different BUV737 reagents (e.g., CD4 vs. CD45) can have slightly different fluorescence spillover therefore, it may also be necessary to use clone specific compensation controls when using these reagents.



Two-color flow cytometric analysis of CD79b expression on human peripheral blood lymphocytes. Whole blood was stained with APC Mouse Anti-Human CD19 (Cat. No. 555415/561742) and either BUV737 Mouse IgG1, κ Isotype Control (Cat. No. 564299; left panel) or BUV737 Mouse Anti-Human CD79b (Cat. No. 565297; right panel). Erythrocytes were lysed with BD FACS Lysing Solution (Cat. No. 349202). Two-color flow cytometric contour plots showing the correlated expression of CD79b (or Ig Isotype control staining) versus CD19 were derived from gated events with the forward and side light-scattering characteristics of viable lymphocytes. Flow cytometry was performed on a BD™ LSR II.

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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™ BUV737 under optimum conditions, and unconjugated antibody and free BD Horizon BUV737 were removed.

Application Notes

Application

Flow cytometry

Routinely Tested

Recommended Assay Procedure:

For optimal and reproducible results, BD Horizon Brilliant Stain Buffer should be used anytime two or more BD Horizon Brilliant dyes 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 Brilliant Stain Buffer (Cat. No. 563794/566349) or the Brilliant Stain Buffer Plus (Cat. No. 566385).

Suggested Companion Products

Catalog Number	Name	Size	Clone
555415	APC Mouse Anti-Human CD19	100 Tests	HIB19
561742	APC Mouse Anti-Human CD19	25 Tests	HIB19
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)
564299	BUV737 Mouse IgG1, κ Isotype Control	50 µg	X40
563794	Brilliant Stain Buffer	100 Tests	(none)
566385	Brilliant Stain Buffer Plus	1000 Tests	(none)
566349	Brilliant Stain Buffer	1000 Tests	(none)
349202	BD FACSTM 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-µl experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
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. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
6. BD Horizon Brilliant Ultraviolet 737 is covered by one or more of the following US patents: 8,110,673; 8,158,444; 8,227,187; 8,575,303; 8,354,239.
7. 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.
8. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

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