

Technical Data Sheet

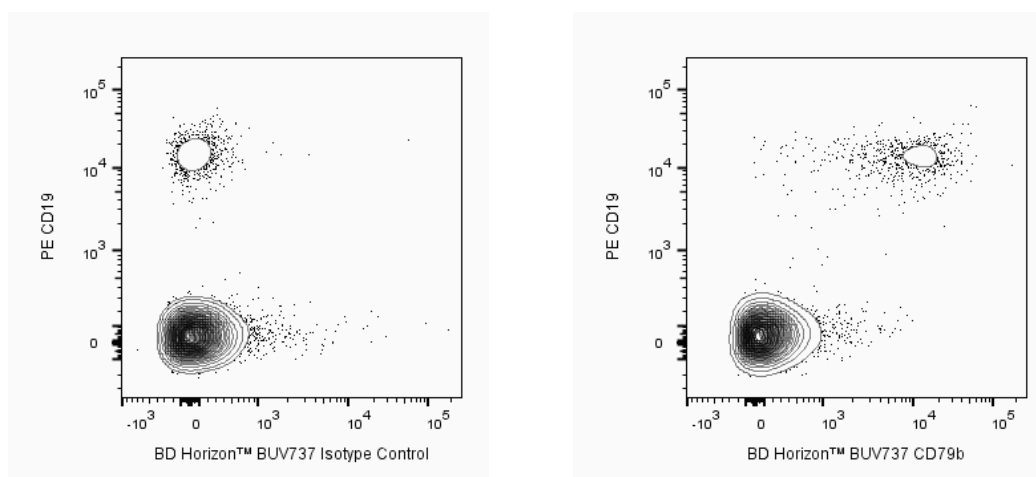
BUV737 Mouse Anti-Human CD79b**Product Information**

Material Number:	612814
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 with an Ex Max near 350 nm and an Em Max near 737 nm. BD Horizon Brilliant BUV737 can be excited by the ultraviolet laser (355 nm) and detected with a 740/35 nm filter. Due to the excitation of the acceptor dye by the red laser line, there may be significant spillover into red laser detectors with filters in the 700-720 nm range.



Two-color flow cytometric analysis of CD79b expression on human peripheral blood lymphocytes. Whole blood was stained with PE Mouse Anti-Human CD19 (Cat. No. 555413/561741) and either BD Horizon™ BUV737 Mouse IgG1, κ Isotype Control (Cat. No. 612758; Left Plot) or BD Horizon BUV737 Mouse Anti-Human CD79b (Cat. No. 612814; Right Plot). 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 intact lymphocytes. Flow cytometry and data analysis were performed using a BD LSRFortessa™ X-20 Cell Analyzer System and FlowJo™ software.

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.

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Application Notes

Application

Flow cytometry

Routinely Tested

Recommended Assay Procedure:

BD™ CompBeads can be used as surrogates to assess fluorescence spillover (Compensation). When fluorochrome-conjugated antibodies are bound to BD CompBeads, they have spectral properties very similar to cells. However, for some fluorochromes there can be small differences in spectral emissions compared to cells, resulting in spillover values that differ when compared to biological controls. It is strongly recommended that when using a reagent for the first time, users compare the spillover on cells and BD CompBeads. This will ensure that BD CompBeads are appropriate for your specific cellular application.

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 BD Horizon Brilliant Stain Buffer (Cat. No. 563794/566349) or the BD Horizon Brilliant Stain Buffer Plus (Cat. No. 566385).

Note: When using high concentrations of antibody, background binding of this dye to erythroid cell subsets (mature erythrocytes and precursors) has been observed. For researchers studying these cell populations, or in cases where light scatter gating does not adequately exclude these cells from the analysis, this background may be an important factor to consider when selecting reagents for panel(s).

Suggested Companion Products

Catalog Number	Name	Size	Clone
555413	PE Mouse Anti-Human CD19	100 Tests	HIB19
561741	PE Mouse Anti-Human CD19	25 Tests	HIB19
349202	BD FACS™ Lysing Solution	100 mL	(none)
555899	Lysing Buffer	100 mL	(none)
563794	Brilliant Stain Buffer	100 Tests	(none)
566349	Brilliant Stain Buffer	1000 Tests	(none)
566385	Brilliant Stain Buffer Plus	1000 Tests	(none)
612758	BUV737 Mouse IgG1, κ Isotype Control	50 µg	X40
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 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. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
5. 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.
6. 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.
7. Please refer to <http://regdocs.bd.com> to access safety data sheets (SDS).
8. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.

References

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