

# Technical Data Sheet

## BV750 Mouse Anti-Human CD79b

### Product Information

|                    |   |
|--------------------|---|
| Material Number:   | 747069  |
| Size:              | 50 µg   |
| Clone:             | 3A2-2E7   |
| Alternative Name:  | Igβ; B29; IGB; AGM6; CD79B  |
| Reactivity:        | Human (Tested in Development)                                       |
| Isotype:           | Mouse BALB/c IgG1, κ  |
| Immunogen:         | Cell membranes from human B-prol lymphocytic leukemia (B-PLL) cells |
| Application:       | Flow cytometry (Qualified)  |
| Concentration:     | 0.2 mg/ml   |
| Workshop No.:      | V B037  |
| Storage Buffer:    | Aqueous buffered solution containing ≤0.09% sodium azide.           |
| Regulatory Status: | RUO   |

### Description

The 3A2-2E7 monoclonal antibody (also known as SN8) specifically recognizes CD79b. Immunoglobulin (Ig) antigen receptors are composed of a non-covalently-associated complex of Ig and two other proteins, Igα and Igβ, clustered as CD79a and CD79b, respectively. CD79b is a membrane glycoprotein of 229 residues, with a predicted relative molecular mass of 36-40 kDa. Its expression is restricted to B lineage cells. CD79b reportedly associates with surface IgM and is involved in signal transduction. The 3A2-2E7 antibody has similar reactivity characteristics as clone CB3-1. The 3A2-2E7 and CD3-1 antibodies specifically react with an epitope that is enhanced on certain B-cell leukemias such as prolymphocytic leukemia and lymphoma, but not on chronic lymphocytic leukemia.

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 |
|----------------|---------------------------------|-----------|-------|
| 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 [wwwbdbiosciences.com/colors](http://wwwbdbiosciences.com/colors).
7. Please refer to [wwwbdbiosciences.com/us/s/resources](http://wwwbdbiosciences.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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