

# Technical Data Sheet

## BV711 Rat Anti-Mouse CD62E

### Product Information

|                    |   |
|--------------------|---|
| Material Number:   | 740694  |
| Size:              | 50 µg   |
| Clone:             | 10E9.6  |
| Alternative Name:  | Sele; E-selectin; Elam; ELAM-1; LECAM2; LYAM2               |
| Reactivity:        | Mouse (Tested in Development)                               |
| Isotype:           | Rat LEW, also known as Lewis IgG2a, κ                       |
| Immunogen:         | Mouse brain capillary endothelioma bEnd.3 (TNFα-stimulated) |
| Application:       | Flow cytometry (Qualified)                                  |
| Concentration:     | 0.2 mg/ml   |
| Entrez Gene ID:    | 20339   |
| Storage Buffer:    | Aqueous buffered solution containing ≤0.09% sodium azide.   |
| Regulatory Status: | RUO   |

### Description

The 10E9.6 monoclonal antibody specifically binds to the 97-110 kDa cell surface glycoprotein E-selectin (CD62E), also known as endothelial-leukocyte adhesion molecule-1 (ELAM-1), which is expressed on endotoxin- or cytokine-stimulated mouse endothelial cells. A suspension of TNFα stimulated mouse brain capillary endothelioma cells, from the cell line bEnd.3, was used as the immunogen. The epitope recognized by mAb 10E9.6 has been mapped to the first and/or second complement regulatory protein repeat domains of E-selectin. The 10E9.6 antibody has been reported to block binding of a monocyte cell line to E-selectin in vitro and to block neutrophil migration in BALB/c, but not C57BL/6 mice. It has no effect on leukocyte rolling in TNFα-treated mouse venules or on in vitro adhesion of myeloid cells to E-selectin. Studies have demonstrated that Cutaneous Lymphocyte Antigen (CLA), recognized by mAb HECA-452 (Cat. no. 555946), may be a ligand for CD62E.

The antibody was conjugated to BD Horizon™ BV711 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 711-nm. BD Horizon BV711 can be excited by the violet laser and detected in a filter used to detect Cy™5.5 / Alexa Fluor® 700-like dyes (eg, 712/20-nm filter). Due to the excitation and emission characteristics of the acceptor dye, there may be moderate spillover into the Alexa Fluor® 700 and PerCP-Cy5.5 detectors. However, the spillover can be corrected through compensation as with any other dye combination.

### Preparation and Storage Section

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 BV711 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 |
|----------------|--|-----------|-------|
| 563047         | BV711 Rat IgG2a, κ Isotype Control RUO                           | 50 µg     |       |
| 554656         | Stain Buffer (FBS) RUO   | 500 mL    |       |
| 554657         | Stain Buffer (BSA) RUO   | 500 mL    |       |
| 563794         | Brilliant Stain Buffer RUO                                       | 100 Tests |       |
| 555899         | Lysing Buffer RUO  | 100 mL    |       |
| 553141         | Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™) 2.4G2 RUO | 0.1 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](http://www.bdbiosciences.com/colors).
7. Please refer to [www.bdbiosciences.com/us/s/resources](http://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 711 is covered by one or more of the following US patents: 8,110,673; 8,158,444; 8,227,187; 8,455,613; 8,575,303; 8,354,239.
10. Cy is a trademark of Amersham Biosciences Limited.
11. Alexa Fluor® is a registered trademark of Life Technologies Corporation.

## References

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- Weller A, Isenmann S, Vestweber D. Cloning of the mouse endothelial selectins. Expression of both E- and P-selectin is inducible by tumor necrosis factor alpha. *J Biol Chem.* 1992; 267(21):15176-15183.

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