

## Technical Data Sheet

## BV421 Mouse Anti-Human CD62E

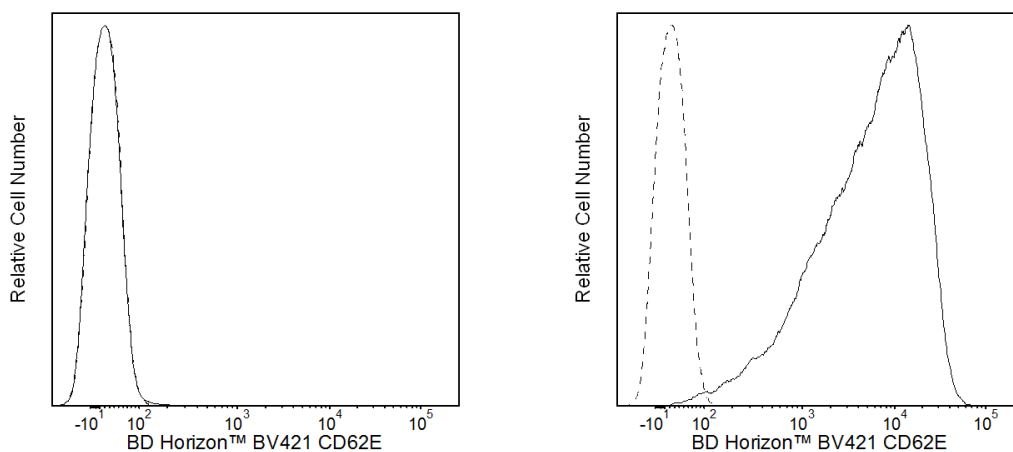
## Product Information

<b>Material Number:</b>	<b>563360</b>
<b>Alternate Name:</b>	SELE; E-selectin; Selectin E; ELAM; ELAM1; ESEL; LECAM2
<b>Size:</b>	100 tests
<b>Vol. per Test:</b>	5 µl
<b>Clone:</b>	68-5H11
<b>Isotype:</b>	Mouse IgG1, κ
<b>Reactivity:</b>	QC Testing: Human
<b>Workshop:</b>	VI A090
<b>Storage Buffer:</b>	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

## Description

The 68-5H11 monoclonal antibody specifically binds to CD62E. This adhesion molecule is a 97-115 kDa type I transmembrane glycoprotein that is encoded by the *SELE* gene. CD62E is also known as E-selectin, Endothelial-leukocyte adhesion molecule-1 (ELAM-1), and Leukocyte endothelial cell adhesion molecule 2 (LECAM-2). CD62E is minimally expressed by unstimulated endothelium. Activated endothelial cells upregulate surface CD62E expression in response to various activators including inflammatory cytokines such as Interleukin-1 and Tumor Necrosis Factor. CD62E plays a role in leucocyte extravasation by promoting leucocyte rolling on activated endothelial cells during inflammation. CD62E may also play a role in the metastasis of certain tumor cells. The adhesion between endothelial CD62E molecules and a carbohydrate ligand on neutrophils is inhibited by the mAb 68-5H11.

The antibody was conjugated to BD Horizon™ BV421 which is part of the BD Horizon™ Brilliant Violet™ family of dyes. With an Ex Max of 407-nm and Em Max at 421-nm, BD Horizon™ BV421 can be excited by the violet laser and detected in the standard Pacific Blue™ filter set (eg, 450/50-nm filter). BD Horizon™ BV421 conjugates are very bright, often exhibiting a 10 fold improvement in brightness compared to Pacific Blue™ conjugates.



**Flow cytometric analysis of CD62E expression on HUVEC cells.** Human Umbilical Vein Endothelial Cells (HUVEC) were either untreated (Left Panel) or cultured with Recombinant Human TNF protein (Cat. No. 554618; 20 ng/ml; Right Panel) for 4 hours at 37°C. The cells were stained with BD Horizon™ BV421 Mouse IgG1, κ Isotype Control (Cat. No. 562438; dashed line histogram) or BD Horizon™ BV421 Mouse Anti-Human CD62E antibody (Cat. No. 563360; solid line histogram). The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of viable cells. Flow cytometric analysis was performed using a BD LSRFortessa™ Cell Analyzer System.

## 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™ BV421 under optimum conditions, and unconjugated antibody and free BD Horizon™ BV421 were removed.

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## Application Notes

### Application

Flow cytometry

Routinely Tested

### Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 ml	(none)
562438	BV421 Mouse IgG1, k Isotype Control	50 µg	X40
554618	Recombinant Human TNF	10 µg	(none)

### Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use  $1 \times 10^6$  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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
5. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.
6. Brilliant Violet™ 421 is a trademark of Sirigen.
7. 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).
8. Please refer to [www.bdbiosciences.com/pharming/protocols](http://www.bdbiosciences.com/pharming/protocols) for technical protocols.

### References

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