Technical Data Sheet

BV510 Mouse Anti-Human CD51/CD61

Product Information

Material Number:	744089
Size:	50 µg
Clone:	23C6
Alternative Name:	Vitronectin Receptor; Itgav/Itgb3; Integrins alpha V, beta 3
Reactivity:	Tested in Development:Human
Isotype:	Mouse BALB/c IgG1, κ
Application:	Flow cytometry(Qualified)
Concentration:	0.2 mg/ml
Workshop No.:	V S246, BP391
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.
Regulatory Status:	RUO

Description

The 23C6 monoclonal antibody specifically binds to the Integrin αvβ3 heterodimeric complex (CD51/CD61) that is expressed on osteoclasts, endothelial cells, macrophages, melanoma cells, some B cells and in very low amounts on platelets. This antibody has been reported to crossreact with chicken, bovine, and rabbit, but not with rat αvβ3. The integrin αvβ3 heterodimer, often referred to as the vitronectin receptor, binds several ligands in addition to vitronectin including, von Willebrand factor, thrombospondin, osteopontin, bone sialoprotein, neural adhesion molecule L1, laminin, fibronectin, and fibrinogen. The binding of some ligands to the vitronectin receptor has been reported to be inhibited by the 23C6 monoclonal antibody.

The antibody was conjugated to BD Horizon™ BV510 which is part of the BD Horizon Brilliant™ Violet family of dyes. With an Ex Max of 405-nm and Em Max at 510-nm, BD Horizon BV510 can be excited by the violet laser and detected in the BD Horizon V500 (525/50-nm) filter set. BD Horizon BV510 conjugates are useful for the detection of dim markers off the violet laser.

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 BV510 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 or 566349).

Suggested Companion Products

Catalog Number	Name	Size
564219	Human BD Fc Block™	50 µg
564220	Human BD Fc Block™	50 µg
554656	Stain Buffer (FBS)	500 mL
554657	Stain Buffer (BSA)	500 mL
563794	Brilliant Stain Buffer	100 Tests
566349	Brilliant Stain Buffer	100 Tests
349202	Lysing Solution 10X Concentrate	100 mL
555899	Lysing Buffer	100 mL
562946	BV510 Mouse IgG1, k Isotype Control	50 µg

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.
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. BD Horizon Brilliant Violet 510 is covered by one or more of the following US patents: 8,575,303; 8,354,239.
9. Please refer to www.bdbiosciences.com/us/s/resources for technical protocols.

References

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