Technical Data Sheet

BV510 Mouse Anti-Human CD41a

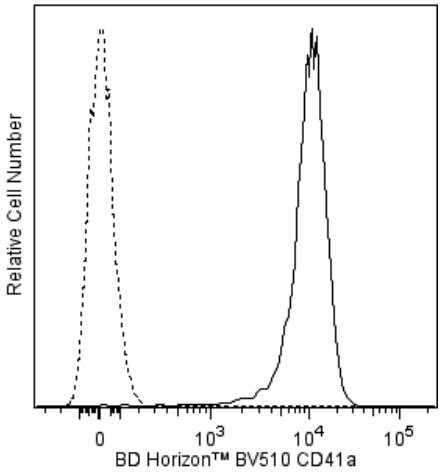
Product Information

Material Number:	**563250**
Alternate Name:	ITGA2B; Integrin alpha-2b (αIIb); Platelet glycoprotein IIb (GPIIb)
Size:	50 tests
Vol. per Test:	5 µl
Clone:	HIP8
Immunogen:	Purified platelet membrane glycoproteins
Isotype:	Mouse (BALB/c) IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	IV P38
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The HIP8 monoclonal antibody specifically binds to the α-chain of CD41. CD41 is also known as Integrin αIIb or Platelet GPIIb. The calcium-dependent complex of CD41 and CD61 (β3 integrin or GPIIIa) is normally expressed on platelets and megakaryocytes. The CD41/CD61 complex is the receptor for fibrinogen, fibronectin and von Willebrand factor, and mediates platelet adhesion and aggregation. CD41 (clone HIP8) completely inhibits ADP-, epinephrine-, and collagen-induced platelet activation, and partially inhibits ristocetin- and thrombin-induced platelet activation. This antibody is useful in the morphological and physiological studies of platelets and megakaryocytes.

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.



Flow cytometric analysis of CD41a expression on human peripheral blood platelet. *Platelets were isolated from fresh whole blood and fixed with BD Cytofix™ Fixation Buffer (Cat. No. 554655). After washing, the fixed platelets were stained with either BD Horizon™ BV510 Mouse IgG1, κ Isotype Control (Cat. No. 562946; dashed line histogram) or BD Horizon™ BV510 Mouse Anti-Human CD41a antibody (Cat. No. 563250; solid line histogram). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of platelets. Flow cytometric analysis was performed using a BD™ LSR II Flow Cytometer 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™ BV510 under optimum conditions, and unconjugated antibody and free BD Horizon™ BV510 were removed.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 ml	(none)
562946	BV510 Mouse IgG1, k Isotype Control	50 µg	X40
554655	Fixation Buffer	100 ml	(none)

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	800.979.9408	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country contact information, visit **bdbiosciences.com/contact**

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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
3. An isotype control should be used at the same concentration as the antibody of interest.
4. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
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. Brilliant Violet™ 510 is a trademark of Sirigen.

References

von dem Borne AEGKr, Modderman PW. Cluster report: CD41. In: Knapp W, Dörken B, Gilks WR, et al, ed. *Leucocyte Typing IV: White Cell Differentiation Antigens.* New York, NY: Oxford University Press; 1989:997-999. (Clone-specific: Functional assay, Immunoprecipitation)

von dem Borne AEGKr, Modderman PW, Admiraal LG, Nieuwenhuis, HK. Platelet antibodies, the overall results. In: Knapp W, Dörken B, Gilks WR, et al, ed. *Leucocyte Typing IV: White Cell Differentiation Antigens.* New York, NY: Oxford University Press; 1989:951-966. (Clone-specific)

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	800.979.9408	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country contact information, visit **bdbiosciences.com/contact**