Technical Data Sheet

V450 Mouse Anti-Human CD36

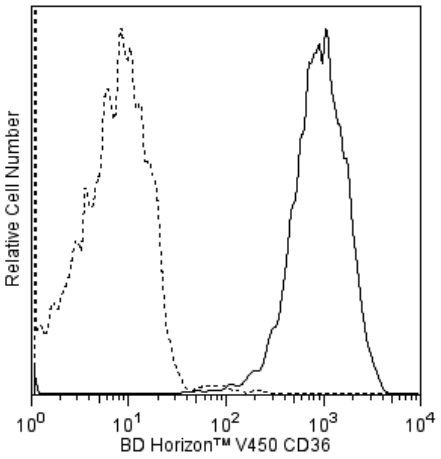
Product Information

Material Number:	**561535**
Alternate Name:	GPIIIb; Platelet GPIV; OKM5-antigen; PASIV
Size:	50 tests
Vol. per Test:	5 µl
Clone:	CB38
Isotype:	Mouse IgM, κ
Reactivity:	QC Testing: Human
Workshop:	IV P106
Storage Buffer:	Aqueous buffered solution containing protein stabilizer and ≤0.09% sodium azide.

Description

The CB38 monoclonal antibody specifically binds to CD36. CD36 is a 88 kDa glycoprotein IV (GPIV), the receptor for extracellular matrix proteins such as collagen and thrombospondin. CD36 is known to mediate the adhesion of *Plasmodium falciparum*. CD36 antigen is expressed on monocytes, platelets, endothelial cells, and some human tumor cell lines but not on lymphocytes and granulocytes. It is a very early marker of erythroid differentiation. CD36 antibody induces degranulation, release of ATP and serotonin, increase in [Ca2+]ι, and tyrosine phosphorylation of a substrate protein of 130 kDa.

The antibody is conjugated to BD Horizon™ V450, which has been developed for use in multicolor flow cytometry experiments and is available exclusively from BD Biosciences. It is excited by the Violet laser Ex max of 406 nm and has an Em Max at 450 nm. Conjugates with BD Horizon™ V450 can be used in place of Pacific Blue™ conjugates.



Flow cytometric analysis of CD36 expression on human peripheral blood platelet. *Platelets were isolated from fresh whole blood and fixed with 2% formaldehyde. After washing, the fixed platelets were stained with either BD Horizon™ V450 Mouse Anti-Human CD36 antibody (Cat. No. 561535; solid line histogram) or with a BD Horizon™ V450 Mouse IgM, κ Isotype Control (Cat. No. 560861; dashed line histogram). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of platelets. Flow cytometry 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™ V450 under optimum conditions, and unreacted BD Horizon™ V450 was removed.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
560861	V450 Mouse IgM, κ Isotype Control	0.1 mg	G155-228
554656	Stain Buffer (FBS)	500 ml	(none)

BD Biosciences

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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. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. An isotype control should be used at the same concentration as the antibody of interest.
4. 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.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
6. BD Horizon™ V450 has a maximum absorption of 406 nm and maximum emission of 450 nm. Before staining with this reagent, please confirm that your flow cytometer is capable of exciting the fluorochrome and discriminating the resulting fluorescence.
7. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.

References

Alessio M, Greco NJ, Primo L, et al. Platelet activation and inhibition of malarial cytoadherence by the anti-CD36 IgM monoclonal antibody NL07. *Blood.* 1993; 82(12):3637-3647. (Biology)

Alessio M, Roggero S, Bussolino F, Saitta M, Malavasi F. Characterization of the murine monoclonal antibody NL07 specific for the human thrombospondin receptor (CD36 molecule). *Curr Stud Hematol Blood Transfus.* 1991; 58:182-186. (Biology)

Knapp W, Dorken B, Rieber EP, et al, ed. *Leucocyte Typing IV*. New York: Oxford University Press; 1989:1-1208. (Clone-specific)