Technical Data Sheet

# PerCP-Cy™5.5 Mouse Anti-Human CD36

## Product Information

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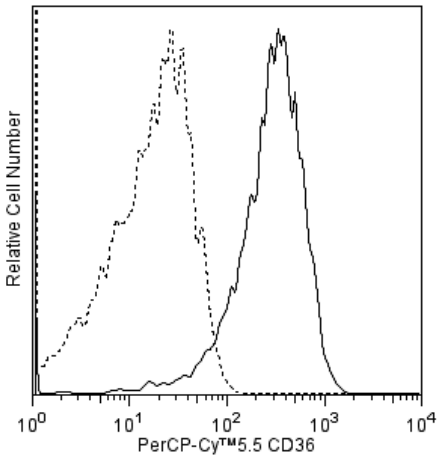
| **Material Number:** | **561536** |
| **Alternate Name:** | GPIIIb; Platelet GPIV; OKM5-antigen; PASIV |
| **Size:** | 50 tests |
| **Vol. per Test:** | 5 µl |
| **Clone:** | CB38 |
| **Isotype:** | Mouse IgM, κ |
| **Reactivity:** | QC Testing: Human |
| **Workshop:** | IV P106 |
| **Storage Buffer:** | Aqueous buffered solution containing BSA, 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.




***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 PerCP-Cy™5.5 Mouse Anti-Human CD36 antibody (Cat. No. 561536; solid line histogram) or with a PerCP-Cy™5.5 Mouse IgM, κ Isotype Control (Cat. No. 560857; 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 PerCP-Cy5.5 under optimum conditions, and unconjugated antibody and free PerCP-Cy5.5 were removed. Storage of PerCP-Cy5.5 conjugates in unoptimized diluent is not recommended and may result in loss of signal intensity.

## Application Notes

**Application**

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| Flow cytometry | Routinely Tested |

## Suggested Companion Products

| Catalog Number | Name | Size | Clone |
|---|---|---|---|
| 560857 | PerCP-Cy™5.5 Mouse IgM, κ Isotype Control | 0.1 mg | G155-228 |
| 554656 | Stain Buffer (FBS) | 500 ml | (none) |

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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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. An isotype control should be used at the same concentration as the antibody of interest.
5. Please observe the following precautions: Absorption of visible light can significantly alter the energy transfer occurring in any tandem fluorochrome conjugate; therefore, we recommend that special precautions be taken (such as wrapping vials, tubes, or racks in aluminum foil) to prevent exposure of conjugated reagents, including cells stained with those reagents, to room illumination.
6. 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.
7. PerCP-Cy5.5–labelled antibodies can be used with FITC- and R-PE–labelled reagents in single-laser flow cytometers with no significant spectral overlap of PerCP-Cy5.5, FITC, and R-PE fluorescence.
8. PerCP-Cy5.5 is optimized for use with a single argon ion laser emitting 488-nm light. Because of the broad absorption spectrum of the tandem fluorochrome, extra care must be taken when using dual-laser cytometers, which may directly excite both PerCP and Cy5.5™. We recommend the use of cross-beam compensation during data acquisition or software compensation during data analysis.
9. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
10. This product is subject to proprietary rights of Amersham Biosciences Corp. and Carnegie Mellon University and made and sold under license from Amersham Biosciences Corp. This product is licensed for sale only for research. It is not licensed for any other use. If you require a commercial license to use this product and do not have one return this material, unopened to BD Biosciences, 10975 Torreyana Rd, San Diego, CA 92121 and any money paid for the material will be refunded.
11. Cy is a trademark of Amersham Biosciences Limited. This conjugated product is sold under license to the following patents: US Patent Nos. 5,486,616; 5,569,587; 5,569,766; 5,627,027.

## 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)