

Technical Data Sheet

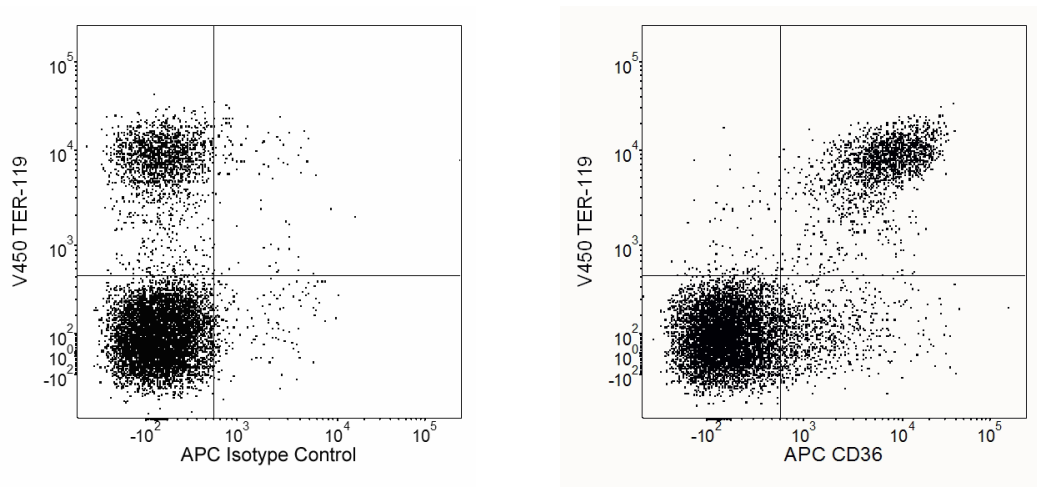
APC Mouse Anti-Mouse CD36

Product Information

Material Number:	562744
Alternate Name:	Platelet glycoprotein 4; PAS-4; GPIIIB; Fatty acid translocase; Scavenger R
Size:	0.1 mg
Concentration:	0.2 mg/ml
Clone:	CRF D-2712
Immunogen:	Recombinant mouse CD36
Isotype:	Mouse (Cd36 null) IgA, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The CRF D-2712 monoclonal antibody specifically binds to mouse and rat CD36, an 88-kDa glycoprotein member of the class B scavenger receptor family. CD36 is a multifunctional receptor that has a variety of ligands and is expressed on many cell types. Consequently, it is known by several names, including macrophage scavenger receptor, platelet glycoprotein IV, and fatty acid translocase. Cells that express CD36 include platelets, megakaryocytes, monocytes/macrophages, dendritic cells, erythroid precursors, microvascular endothelia, skeletal, cardiac, and smooth muscle cells, adipocytes, and epithelia of retina, breast, and intestine. This multi-ligand receptor functions in the clearance of apoptotic cells and abnormal erythrocytes (in malaria and sickle-cell anemia), the transport of long-chain fatty acids and oxidized low-density lipoproteins, the regulation of angiogenesis by mediating the effects of thrombospondin-1, and the mediation of coronary vasoconstriction. Crosslinking of cell-surface CD36 with plate-bound CRF D-2712 antibody promotes internalization of photoreceptor outer segment fragments by cultured retinal pigment epithelium.



**Multicolor flow cytometric analysis of CD36 expression on BALB/c mouse bone marrow cells.** Bone marrow cells were stained simultaneously with BD Horizon™ V450 Rat anti-Mouse Ter-119 antibody (Cat. No. 560504) and with either APC Mouse IgA, κ Isotype Control (Cat. No. 562140, Left Panel) or APC Mouse anti-Mouse CD36 antibody (Cat.No. 562744, Right Panel). Two-color flow cytometric dot plots show the correlated expression patterns of CD36 (or Ig isotype control staining) versus Ter-119 for gated events with the forward and side light-scatter characteristics of viable bone marrow cells. 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 to APC under optimum conditions, and unconjugated antibody and free APC were removed.

Application Notes

Application

Flow cytometry	Routinely Tested
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## Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 ml	(none)
562140	APC Mouse IgA, $\kappa$ Isotype Control	0.1 mg	M18-254
560504	V450 Rat Anti-Mouse TER-119/Erythroid Cells	50 $\mu$ g	TER-119

## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Please refer to [www.bdbiosciences.com/pharming/en/protocols](http://www.bdbiosciences.com/pharming/en/protocols) for technical protocols.
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. This APC-conjugated reagent can be used in any flow cytometer equipped with a dye, HeNe, or red diode laser.
6. 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).
7. 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.

## References

Bodart V, Febbraio M, Demers A, et al. CD36 mediates the cardiovascular action of growth hormone-releasing peptides in the heart. *Circ Res*. 2002; 90(8):844-849. (Biology)

Febbraio M, Hajjar DP, Silverstein RL. CD36: a class B scavenger receptor involved in angiogenesis, atherosclerosis, inflammation, and lipid metabolism. *J Clin Invest*. 2001; 108(6):785-791. (Biology)

Finnemann SC, Silverstein RL. Differential roles of CD36 and  $\alpha$ 5 $\beta$ 1 integrin in photoreceptor phagocytosis by the retinal pigment epithelium. *J Exp Med*. 2001; 194(9):1289-1298. (Immunogen: Immunofluorescence, Immunoprecipitation)

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