

Technical Data Sheet

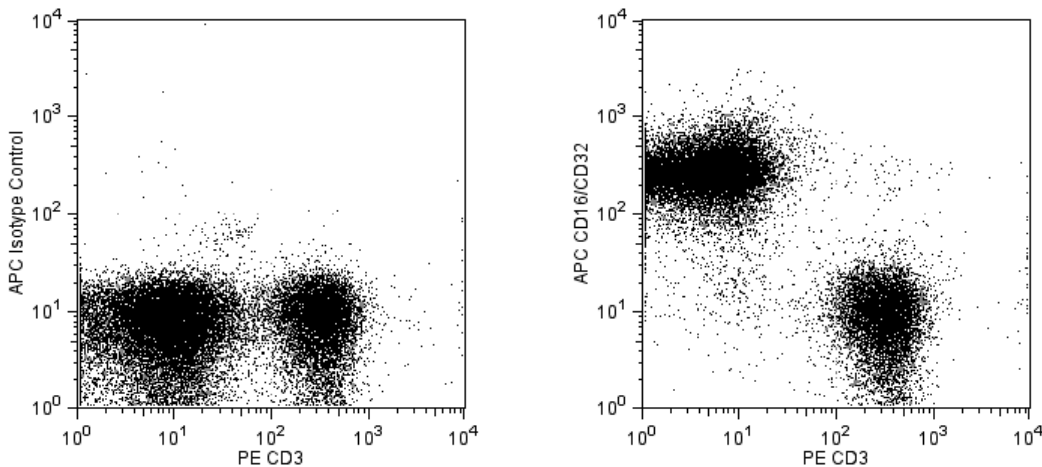
APC Rat anti-Mouse CD16/CD32 (Fcγ III/II Receptor)

Product Information

Material Number:	558636
Alternate Name:	FcγRIII/FcγRII; Fcgr3/Fcgr2
Size:	0.1 mg
Clone:	2.4G2
Isotype:	Rat (SD) IgG2b, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 2.4G2 antibody reacts specifically with a common nonpolymorphic epitope on the extracellular domains of the mouse FcγIII and FcγII receptors. It has also been reported to bind the FcγI receptor (CD64) via its Fc domain. 2.4G2 mAb blocks non-antigen-specific binding of immunoglobulins to the FcγIII and FcγII, and possibly FcγI, receptors *in vitro* and *in vivo*. CD16 and/or CD32 are expressed on natural killer cells, monocytes, macrophages, dendritic cells (at low levels), Kupffer cells, granulocytes, mast cells, B lymphocytes, immature thymocytes, and some activated mature T lymphocytes.



Two color analysis of the expression of CD16/CD32 on mouse spleen cells. Mouse splenocytes were simultaneously stained with PE-conjugated anti-mouse CD3e mAb 145-2C11 (Cat. No. 553063/553064) and either APC-conjugated CD16/CD32 mAb 2.4G2 (Cat. No. 558636; right panel) or an APC-conjugated rat anti-mouse isotype control (Cat. No. 553991; left panel). The dot plots were derived from the gated events based on lymphocytes and the light scattering characteristics of viable cells. Flow cytometry was performed on a BD FACSCalibur™ System.

Preparation and Storage

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. Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely Tested
----------------	------------------

Suggested Companion Products

Catalog Number	Name	Size	Clone
553991	APC Rat IgG2b, κ Isotype Control	0.1 mg	A95-1
553064	PE Hamster Anti-Mouse CD3e	0.2 mg	145-2C11

Product Notices

- Since applications vary, each investigator should titrate the reagent to obtain optimal results.

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](http://bdbiosciences.com/contact)

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited. For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale. Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2011 BD



2. Please refer to [www.bdbiosciences.com/pharming/protocols](http://www.bdbiosciences.com/pharming/protocols) for technical protocols.
3. 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).
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.

## References

Jensen WA, Marschner S, Ott VL, Cambier JC. FcγRIIB-mediated inhibition of T-cell receptor signal transduction involves the phosphorylation of SH2-containing inositol 5-phosphatase (SHIP), dephosphorylation of the linker of activated T-cells (LAT) and inhibition of calcium mobilization. *Biochem Soc Trans.* 2001; 29(6):840-846. (Clone-specific: Blocking)

Kaji K, Takeshita S, Miyake K, Takai T, Kudo A. Functional association of CD9 with the Fc gamma receptors in macrophages. *J Immunol.* 2001; 166(5):3256-3265. (Biology: (Co)-stimulation)

Kurlander RJ, Ellison DM, Hall J. The blockade of Fc receptor-mediated clearance of immune complexes in vivo by a monoclonal antibody (2.4G2) directed against Fc receptors on murine leukocytes. *J Immunol.* 1984; 133(2):855-862. (Clone-specific: Blocking)

Rodewald HR, Awad K, Moingeon P, et al. Fc gamma RII/III and CD2 expression mark distinct subpopulations of immature CD4-CD8- murine thymocytes: in vivo developmental kinetics and T cell receptor beta chain rearrangement status. *J Exp Med.* 1993; 177(4):1079-1092. (Clone-specific: Immunoprecipitation)

Titus JA, Finkelman FD, Stephany DA, Jones JF, Segal DM. Quantitative analysis of Fc gamma receptors on murine spleen cell populations by using dual parameter flow cytometry. *J Immunol.* 1984; 133(2):556-561. (Biology: Cell separation)

Unkeless JC. Characterization of a monoclonal antibody directed against mouse macrophage and lymphocyte Fc receptors. *J Exp Med.* 1979; 150(3):580-596. (Immunogen)

Vremec D, Zorbas M, Scollay R, et al. The surface phenotype of dendritic cells purified from mouse thymus and spleen: investigation of the CD8 expression by a subpopulation of dendritic cells. *J Exp Med.* 1992; 176(1):47-58. (Biology: Cell separation)

## BD Biosciences

[bdbiosciences.com](http://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](http://bdbiosciences.com/contact)

*Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.*

*For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.*

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2011 BD

