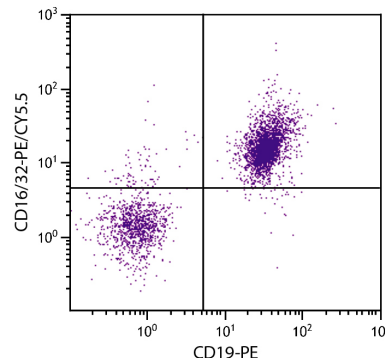




Rat Anti-Mouse CD16/32

Cat. No.	Format	Size
1630-01	Purified (UNLB)	0.5 mg
1630-02	Fluorescein (FITC)	0.5 mg
1630-08	Biotin (BIOT)	0.5 mg
1630-09	R-phycoerythrin (PE)	0.1 mg
1630-09L	R-phycoerythrin (PE)	0.2 mg
1630-11	Allophycocyanin (APC)	0.1 mg
1630-13	Spectral Red® (SPRD)	0.1 mg
1630-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg
1630-16	R-phycoerythrin-Cyanine 5.5 (PE/CY5.5)	0.1 mg
1630-17	R-phycoerythrin-Cyanine 7 (PE/CY7)	0.1 mg



BALB/c mouse splenocytes were stained with Rat Anti-Mouse CD16/32-PE/CY5.5 (SB Cat. No. 1630-16) and Rat Anti-Mouse CD19-PE (SB Cat. No. 1575-09).

Overview

Clone	93
Isotype	Rat IgG _{2a} λ
Immunogen	VH81X Tg B cells and T220 stromal cell line
Specificity	Mouse CD16/32
Alternate Name(s)	FcγII, FcγIII, Fc gamma II receptor, Fc gamma III receptor, FcγR2, IGFR2, FcGR3, IGFR3, Fc receptor block

Description

The lymphocyte Fc γ receptors recognize the Fc portion of IgG, presented either as immune complexes or as free antibody. The different classes of receptors are distinct because of varying size, tissue distribution and affinity for IgGs. The Fc type II receptor is expressed on a wide variety of cells including B cells, hematopoietic cells, monocyte/macrophages, neutrophils, platelets, Langerhans cells, eosinophils, basophils, trophoblasts, and endothelial cells of the placenta. The Fc γ type III receptors are higher affinity than the type II and are expressed on macrophages, NK cells and neutrophils. Both types of receptors can be expressed on the same cell and in varying ratios. The receptors are constitutively expressed, although cytokines and lymphokines can modulate their expression. Besides identifying Fc γ R⁺ cells, monoclonal antibodies to the Fc γ II/III receptor have been used to block Fc receptor binding of IgG, Fc-mediated signal transduction and effector functions, clearance of immune complexes and to attenuate infection by organisms dependent on Fc γ R for parasitic invasion. The monoclonal antibody 93 recognizes a conformational epitope formed by Fc γ II and Fc γ III receptors.

Applications

FC – Quality tested ^{2,5}
 IHC-FS – Reported in literature ⁶
 IP – Reported in literature ⁶
 Block – Reported in literature ¹⁻⁴

Working Dilutions

Flow Cytometry	Purified (UNLB) antibody	≤ 3 μg/10 ⁶ cells
	FITC and BIOT conjugates	≤ 3 μg/10 ⁶ cells
	PE, APC, SPRD, PE/CY5.5, and PE/CY7 conjugates	≤ 0.2 μg/10 ⁶ cells
	For flow cytometry, the suggested use of these reagents is in a final volume of 100 μL	
Other Applications	Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.	

For Research Use Only. Not for Diagnostic or Therapeutic Use.

Handling and Storage

- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL or 0.2 mg in 2.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The allophycocyanin (APC) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Spectral Red® (SPRD), R-phycoerythrin-Cyanine 7 (PE/CY7), and R-phycoerythrin-Cyanine 5.5 (PE/CY5.5) conjugates are supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of PBS. Contains no preservative; handle under aseptic conditions. Store at 2-8°C or aliquot into smaller volumes and store at -20°C. Avoid multiple freeze / thaw cycles.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific SDS.

References

1. Rainczuk A, Scorza T, Smooker PM, Spithill TW. Induction of specific T-cell responses, opsonizing antibodies, and protection against Plasmodium chabaudi adami infection in mice vaccinated with genomic expression libraries expressed in targeted and secretory DNA vectors. Infect Immun. 2003;71:4506-15. (Block)
2. Petersen LK, Xue L, Wannemuehler MJ, Rajan K, Narasimhan B. The simultaneous effect of polymer chemistry and device geometry on the in vitro activation of murine dendritic cells. Biomaterials. 2009;30:5131-42. (Block, FC)
3. Safari D, Dekker HA, Rijkers G, Snippe H. Codelivery of adjuvants at the primary immunization site is essential for evoking a robust immune response to neoglycoconjugates. Vaccine. 2011;29:849-54. (Block)
4. Petersen LK, Ramer-Tait AE, Broderick SR, Kong C, Ulery BD, Rajan K, et al. Activation of innate immune responses in a pathogen-mimicking manner by amphiphilic polyanhydride nanoparticle adjuvants. Biomaterials. 2011;32:6815-22. (Block)
5. He W, Hu Z, Liu F, Feng X, Zou P. In vitro co-stimulation of anti-tumor activity by soluble B7 molecules. Acta Biochim Pol. 2006;53:807-13. (FC)
6. Personal communication (IHC-FS, IP)

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Spectral Red® is a PE/CY5 tandem conjugate.

Cy™ is a trademark of Cytiva or one of its subsidiaries.