

Technical Data Sheet

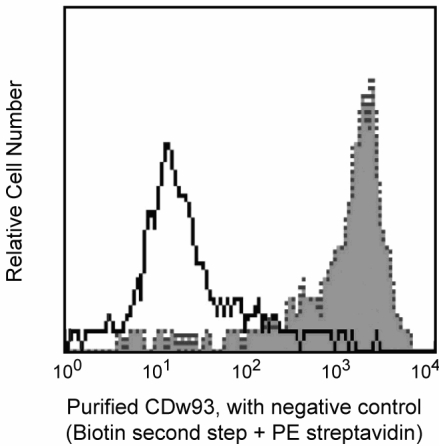
Purified NA/LE Mouse Anti-Human CDw93 (C1qRp)

Product Information

Material Number:	552954
Alternate Name:	C1qRp
Size:	0.5 mg
Concentration:	1.0 mg/ml
Clone:	R139
Isotype:	Mouse IgG2b, κ
Reactivity:	QC Testing: Human
Storage Buffer:	No azide/low endotoxin: Aqueous buffered solution containing no preservative, 0.2µm sterile filtered. Endotoxin level is ≤0.01 EU/µg (≤0.001 ng/µg) of protein as determined by the LAL assay.

Description

The immunogen used to raise R139 antibody was C1q-binding protein preparation derived from U937 cell lysates, as described. Human CDw93 (C1qRp) is a 631 AA, single chain type I membrane glycoprotein expressed on cells of myeloid origin, endothelial cells, and hematopoietic progenitor cells. Human, murine and rat protein sequences have been deduced from cDNA clones and are known to be similar in sequence and organization. CDw93 (C1qRp) binds C1q, the recognition subunit of the first component (C1) of the complement pathway, as well as MBL (Mannose-binding-lectin) and SPA (Pulmonary Surfactant Protein A). Multivalent interaction of CDw93 (C1qRp) expressing cells with C1q, MBL, and SPA, induces enhancement of phagocytosis of suboptimally opsonized particles and/or cellular debris. Antibody R139 neutralizes/blocks C1q-mediated enhancement of phagocytosis, as reported. In addition clone R139 is suitable to detect CDw93 (C1qRp) expression on cells by flow cytometry, CDw93 (C1qRp) in cellular lysates by Western blotting or immunoprecipitation. CDw93 (C1qRp) has been reported to define a human stem cell population with hematopoietic and hepatic potential.



**Expression of CDw93 (C1qRp) by unstimulated human peripheral blood mononuclear cells (PBMC).**  
Human PBMC were stained with the purified NA/LE Mouse Anti-Human CDw93 (C1qRp) antibody (R139, Cat. No. 552954). A histogram overlay shows specific cell staining of gated CD14 positive cells with R139 followed by Biotin Goat Anti-Mouse Ig secondary antibody (Cat. No. 553999) and PE Streptavidin (Cat. No. 554061) compared to secondary step alone as control.

Preparation and Storage

Store undiluted at 4°C.  
This preparation contains no preservatives, thus it should be handled under aseptic conditions.  
The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Application Notes

Application

Flow cytometry	Routinely Tested
Neutralization	Reported

Suggested Companion Products

Catalog Number	Name	Size	Clone
559530	Purified NA/LE Mouse IgG2b, κ Isotype Control	0.5 mg	MPC-11

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



## 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/protocols](http://www.bdbiosciences.com/pharming/protocols) for technical protocols.

## References

Danet GH, Luongo JL, Butler G, et al. C1qRp defines a new human stem cell population with hematopoietic and hepatic potential. *Proc Natl Acad Sci U S A*. 2002; 99(16):10441-10445. (Biology)

Guan E, Robinson SL, Goodman EB, Tenner AJ. Cell-surface protein identified on phagocytic cells modulates the C1q-mediated enhancement of phagocytosis. *J Immunol*. 1994; 152(8):4005-4016. (Immunogen)

Guan EN, Burgess WH, Robinson SL, Goodman EB, McTigue KJ, Tenner AJ. Phagocytic cell molecules that bind the collagen-like region of C1q. Involvement in the C1q-mediated enhancement of phagocytosis. *J Biol Chem*. 1991; 266(30):20345-20355. (Immunogen)

Nepomuceno RR, Henschen-Edman AH, Burgess WH, Tenner AJ. cDNA cloning and primary structure analysis of C1qR(P), the human C1q/MBL/SPA receptor that mediates enhanced phagocytosis in vitro. *Immunity*. 1997; 6(2):119-129. (Clone-specific)

Nepomuceno RR, Ruiz S, Park M, Tenner AJ. C1qRP is a heavily O-glycosylated cell surface protein involved in the regulation of phagocytic activity. *J Immunol*. 1999; 162(6):3583-3589. (Clone-specific)

Nepomuceno RR, Tenner AJ. C1qRP, the C1q receptor that enhances phagocytosis, is detected specifically in human cells of myeloid lineage, endothelial cells, and platelets. *J Immunol*. 1998; 160(4):1929-1935. (Clone-specific)

Prussin C, Metcalfe DD. Detection of intracytoplasmic cytokine using flow cytometry and directly conjugated anti-cytokine antibodies. *J Immunol Methods*. 1995; 188(1):117-128. (Methodology)

Tenner AJ. C1q receptors: regulating specific functions of phagocytic cells. *Immunobiology*. 1998; 199(2):250-264. (Biology)

## 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

