

## Technical Data Sheet

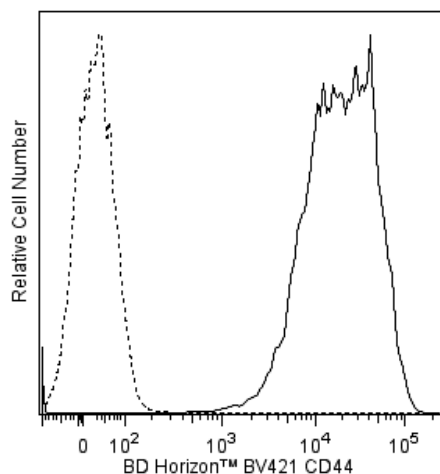
**BV421 Mouse Anti-Human CD44****Product Information**

<b>Material Number:</b>	<b>562890</b>
<b>Alternate Name:</b>	Phagocytic glycoprotein 1; Pgp-1; H-CAM; Hermes; ECMR III; HUTCH-1
<b>Size:</b>	100 tests
<b>Vol. per Test:</b>	5 µl
<b>Clone:</b>	G44-26 (also known as C26)
<b>Isotype:</b>	Mouse IgG2b, κ
<b>Reactivity:</b>	QC Testing: Human
<b>Workshop:</b>	VI A092
<b>Storage Buffer:</b>	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

**Description**

The G44-26 monoclonal antibody specifically binds to the 80-95 kDa, glycosylated type I transmembrane protein, also known as phagocytic glycoprotein-1 (Pgp-1). CD44 is the receptor for hyaluronic acid. CD44 is expressed on leucocytes, erythrocytes, epithelial cells and weakly on platelets. CD44 is also called extracellular matrix receptor type III and has functional roles in cell migration, lymphocyte homing and adhesion during hematopoiesis and lymphocyte activation. This antibody is suitable for staining formalin-fixed, paraffin-embedded tissue sections using citrate buffer pretreatment. This antibody recognizes the epitope 1 of CD44 antigen according to the HLDA workshop studies.

The antibody was conjugated to BD Horizon™ BV421 which is part of the BD Horizon™ Brilliant Violet™ family of dyes. With an Ex Max of 407-nm and Em Max at 421-nm, BD Horizon™ BV421 can be excited by the violet laser and detected in the standard Pacific Blue™ filter set (eg, 450/50-nm filter). BD Horizon™ BV421 conjugates are very bright, often exhibiting a 10 fold improvement in brightness compared to Pacific Blue™ conjugates.



**Flow cytometric analysis of CD44 on human lymphocytes.** Human whole blood was stained with either BD Horizon™ BV421 Mouse Anti-Human CD44 antibody (Cat. No. 562890; solid line histogram) or BD Horizon™ BV421 Mouse IgG2b, κ Isotype Control (Cat. No. 562748; dashed line histogram). The erythrocytes were lysed with BD Pharm Lyse™ Lysing Buffer (Cat. No. 555899). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of viable lymphocytes. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.

**Preparation and Storage**

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

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

The antibody was conjugated with BD Horizon™ BV421 under optimum conditions, and unconjugated antibody and free BD Horizon™ BV421 were removed.

**Application Notes****Application**

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

**Suggested Companion Products**

Catalog Number	Name	Size	Clone
562748	BV421 Mouse IgG2b, κ Isotype Control	50 µg	27-35
555899	Lysing Buffer	100 ml	(none)
554656	Stain Buffer (FBS)	500 ml	(none)

**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. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use  $1 \times 10^6$  cells in a 100- $\mu$ l experimental sample (a test).
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
3. An isotype control should be used at the same concentration as the antibody of interest.
4. Please refer to [www.bdbiosciences.com/pharming/en/protocols](http://www.bdbiosciences.com/pharming/en/protocols) for technical protocols.
5. 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.
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. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.
8. Brilliant Violet™ 421 is a trademark of Sirigen.

## References

Galandrini R, Galluzzo E, Albi N, Grossi CE, Velardi A. Hyaluronate is costimulatory for human T cell effector functions and binds to CD44 on activated T cells. *J Immunol.* 1994; 153(1):21-31. (Biology)

Günther U. CD44: a multitude of isoforms with diverse functions. *Curr Top Microbiol Immunol.* 1993; 184:47-63. (Biology)

Patel DD, Liao HX, Haynes BF. CD44 workshop panel report. In: Kishimoto T, Kikutani H, von dem Borne AEGK, ed. *Leukocyte Typing VI: White Cell Differentiation Antigens*. New York: Garland Publishing Inc; 1997:373-375. (Clone-specific: Flow cytometry)

Schlossman S, Boumell L, et al, ed. *Leucocyte Typing V*. New York: Oxford University Press; 1995. (Biology)

Stamenkovic I, Amiot M, Pesando JM, Seed B. A lymphocyte molecule implicated in lymph node homing is a member of the cartilage link protein family. *Cell.* 1989; 56(6):1057-1062. (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

