

## Technical Data Sheet

## BV510 Mouse Anti-Human CD43

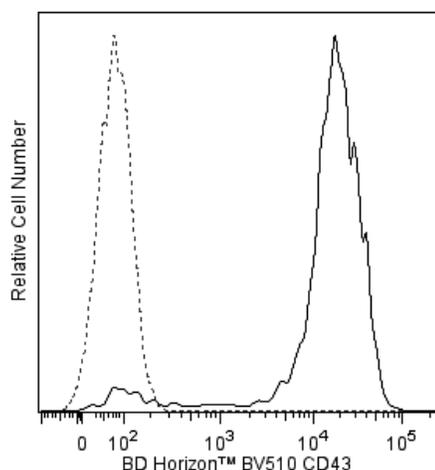
## Product Information

<b>Material Number:</b>	563377
<b>Alternate Name:</b>	SPN; Sialophorin; Galactoglycoprotein/GALGP; GPL115; LEUK; Leukosialin; LSN
<b>Size:</b>	100 tests
<b>Vol. per Test:</b>	5 µl
<b>Clone:</b>	1G10
<b>Isotype:</b>	Mouse IgG1, κ
<b>Reactivity:</b>	QC Testing: Human
<b>Workshop:</b>	V1 N-L166
<b>Storage Buffer:</b>	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

## Description

The 1G10 monoclonal antibody specifically binds to CD43, a 95-135 kDa sialoglycoprotein that is highly expressed on most human leucocytes. CD43 is encoded by the *SPN* gene and is also known as Sialophorin, Galactoglycoprotein (GALGP), Leukosialin, and Leukocyte sialoglycoprotein. The CD43 antigen is expressed on T cells, pre-B cells and activated B cells, NK cells and granulocytes, but is not present on resting peripheral blood B cells, red blood cells, platelets and non-hematopoietic cells. CD43 is enzymatically shed from leucocyte surfaces following activation by various stimuli. CD43 appears to be involved in intercellular interactions that regulate T, B, and NK cell functions. This antibody is suitable for staining formalin-fixed, paraffin-embedded tissue sections with TUF pretreatment.

The antibody was conjugated to BD Horizon™ BV510 which is part of the BD Horizon™ Brilliant Violet™ family of dyes. With an Ex Max of 405-nm and Em Max at 510-nm, BD Horizon™ BV510 can be excited by the violet laser and detected in the BD Horizon™ V500 (525/50-nm) filter set. BD Horizon™ BV510 conjugates are useful for the detection of dim markers off the violet laser.



**Flow cytometric analysis of CD43 expression on human peripheral blood lymphocytes.** Whole blood was stained with BD Horizon™ BV510 Mouse Anti-Human CD43 antibody (Cat. No. 563377; solid line histogram) or with a BD Horizon™ BV510 Mouse IgG1, κ Isotype Control (Cat. No. 562946; dashed line histogram). Erythrocytes were lysed with BD Pharm Lyse™ Lysing Buffer (Cat. No. 555899). The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of viable lymphocytes. Flow cytometric analysis 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 with BD Horizon™ BV510 under optimum conditions, and unconjugated antibody and free BD Horizon™ BV510 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)
562946	BV510 Mouse IgG1, κ Isotype Control	50 µg	X40
555899	Lysing Buffer	100 ml	(none)

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## 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. Brilliant Violet™ 510 is a trademark of Sirigen.

## References

Bazil V, Strominger JL. CD43, the major sialoglycoprotein of human leukocytes, is proteolytically cleaved from the surface of stimulated lymphocytes and granulocytes. *Proc Natl Acad Sci U S A*. 1993 May; 90(9):3792-3796. (Biology)

Borche L, Lozano F, Vilella R, Vives J. CD43 monoclonal antibodies recognize the large sialoglycoprotein of human leukocytes. *Eur J Immunol*. 1987; 17(10):1523-1526. (Biology)

Horejsi V, Stockinger H. CD43 Workshop Panel report. In: Kishimoto T, Kikutani H, von dem Borne A, et al, ed. *Leucocyte Typing VI : White Cell Differentiation Antigens*. New York: Garland Publishing, Inc; 1998:494-497. (Clone-specific: Flow cytometry, Functional assay, Immunoprecipitation)

Zola H, Swart B, Nicholson I, Voss E. *CD43 In: Leukocyte and Stromal Cell Molecules. The CD Markers*. Hoboken, New Jersey: John Wiley & Sons, Inc.; 2007:111-112. (Biology)

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