

## Technical Data Sheet

## BV510 Mouse Anti-Human CD5

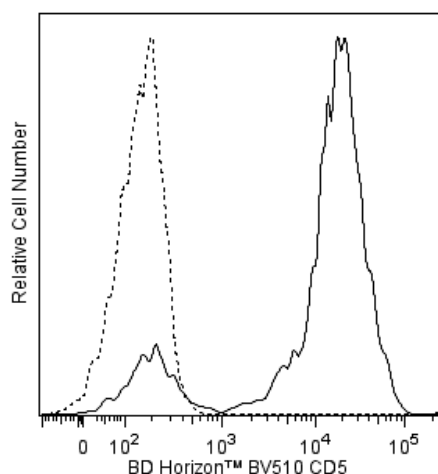
## Product Information

<b>Material Number:</b>	<b>563381</b>
<b>Alternate Name:</b>	CD5 antigen (p56-62); T1; Tp67; LEU1; Lymphocyte antigen T1/Leu-1
<b>Size:</b>	100 tests
<b>Vol. per Test:</b>	5 µl
<b>Clone:</b>	UCHT2
<b>Immunogen:</b>	Human T cells
<b>Isotype:</b>	Mouse (BALB/c) IgG1, κ
<b>Reactivity:</b>	QC Testing: Human
<b>Workshop:</b>	I T4; III T094, T518
<b>Storage Buffer:</b>	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

## Description

The UCHT2 monoclonal antibody specifically binds to CD5. CD5 is a 67 kDa single-chain, type 1 transmembrane glycoprotein expressed on most thymocytes, the majority of peripheral T lymphocytes and a subpopulation of B cells. CD72 has been shown to be the natural ligand for CD5. CD5+ B cells produce polyreactive antibodies (mostly IgM).

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 CD5 expression on human peripheral lymphocytes.** Whole blood was stained with BD Horizon™ BV510 Mouse Anti-Human CD5 antibody (Cat. No. 563381/563380; solid line histogram) or with a BD Horizon™ BV510 Mouse IgG1, κ Isotype Control (Cat. No. 562946; dashed line histogram). The 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)
563380	BV510 Mouse Anti-Human CD5	25 tests	UCHT2
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. An isotype control should be used at the same concentration as the antibody of interest.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
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

Barclay NA, Brown MH, Birkeland ML, et al, ed. *The Leukocyte Antigen FactsBook*. San Diego, CA: Academic Press; 1997. (Biology)

Bernard A, Boumsell L, Dausset J, Milstein C, Schlossman SF, ed. *Leukocyte Typing*. New York: Springer-Verlag; 1984:1-814. (Clone-specific)

Lankester AC, van Schijndel GM, Cordell JL, van Noesel CJ, van Lier RA. CD5 is associated with the human B cell antigen receptor complex. *Eur J Immunol*. 1994; 24(4):812-816. (Biology)

Lydyard PM, Lamour A, MacKenzie LE, Jamin C, Mageed RA, Youinou P. CD5+ B cells and the immune system. *Immunol Lett*. 1993; 38(2):159-166. (Biology)

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Zola H, Swart B, Nicholson I, Voss E. *CD5 In: Leukocyte and Stromal Cell Molecules. The CD Markers*. Hoboken, New Jersey: John Wiley & Sons, Inc.; 2007:49-50. (Biology)

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