Technical Data Sheet

BV421 Mouse Anti-Human CD5

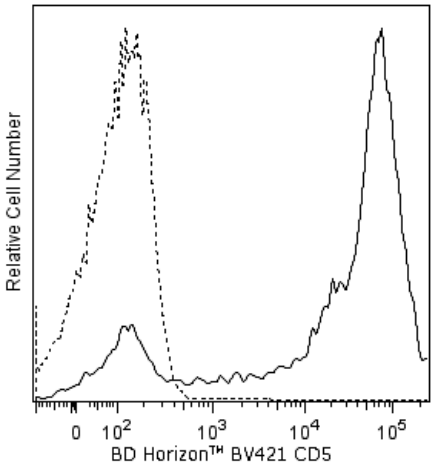
Product Information

Material Number:	**562646**
Alternate Name:	CD5 antigen (p56-62); T1; Tp67; LEU1; Lymphocyte antigen T1/Leu-1
Size:	100 tests
Vol. per Test:	5 µl/test
Clone:	UCHT2
Immunogen:	Human T cells
Isotype:	Mouse (BALB/c) IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	I T4; III T094, T518
Storage Buffer:	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™ 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 CD5 expression on human peripheral lymphocytes. *Whole blood was stained with BD Horizon™ BV421 Mouse Anti-Human CD5 antibody (Cat. No. 562646; solid line histogram) or with a BD Horizon™ BV421 Mouse IgG1, κ Isotype Control (Cat. No. 562438; 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 cytometry 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™ 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
562438	BV421 Mouse IgG1, k Isotype Control	50 µg	X40
554656	Stain Buffer (FBS)	500 ml	(none)
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 × 10^6 cells in a 100-µl 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/pharmingen/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.
7. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.
8. Brilliant Violet™ 421 is a trademark of Sirigen.

References

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Knapp W, Dörken B, Gilks WR, et al, ed. *Leucocyte Typing IV.* New York, NY: Oxford University Press; 1989:1-1182. (Biology)

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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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