

Technical Data Sheet

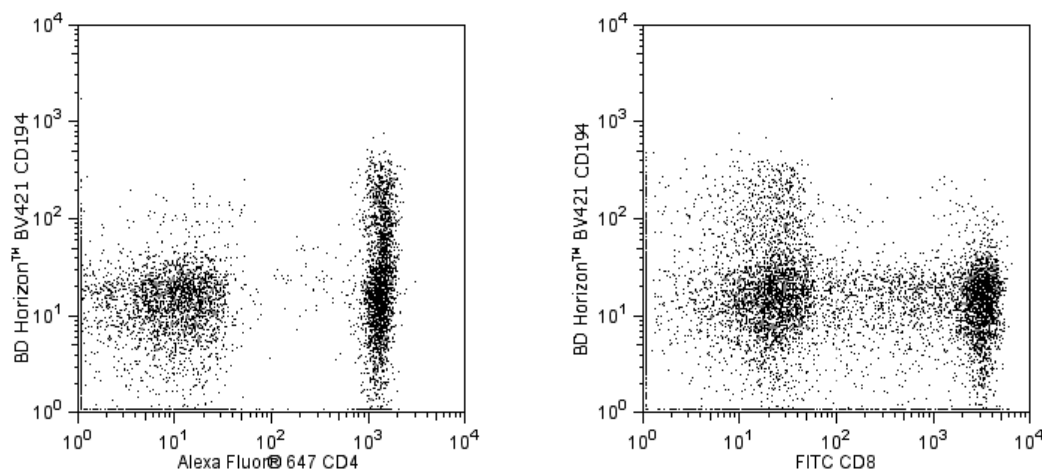
BV421 Mouse Anti-Human CD194**Product Information**

Material Number:	562579
Alternate Name:	CCR4; C-C chemokine receptor type 4; CMKBR4; K5-5
Size:	50 tests
Vol. per Test:	5 µl
Clone:	1G1
Immunogen:	Human CCR4 Transfected Cell Line
Isotype:	Mouse (C57BL/6) IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	HCDM 2006
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The monoclonal antibody 1G1 reacts with CD194, also known as the human CC Chemokine Receptor type 4 (CCR4). CCR4 is expressed on activated Th2 cells, regulatory T cells, activated NK cells, basophils, monocytes and platelets. CCR4 is a seven-transmembrane, G-protein-coupled receptor, and is the specific receptor for CC chemokines, CCL22/MDC/Macrophage-Derived Chemokine and CCL17/TARC/Thymus and Activation-Regulated Chemokine. It has been reported that CCR4 mRNA is expressed mainly in the thymus and spleen. The human CCR4 gene has been mapped to chromosome 3p24. The purified form of this antibody has been reported not to be a neutralizing antibody. The immunogen used to generate the 1G1 hybridoma has been reported to be human CCR4 transfected L1.2 mouse lymphoma cells.

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.



Multicolor flow cytometric analysis of CD194 (CCR4) expression on human peripheral lymphocytes. Human whole blood was stained with BD Horizon™ BV421 Mouse Anti-Human CD194 antibody (Cat. No. 562579) in conjunction with Alexa Fluor® 647 Mouse Anti-Human CD4 antibody (Cat. No. 557707) and FITC Mouse Anti-Human CD8 antibody (Cat. No. 555366/561947/561948). The erythrocytes were lysed with BD Pharm Lyse™ Lysing Buffer (Cat. No. 555899). Two-color flow cytometric dot plots showing the correlated expression patterns of CD4 (Left Panel) or CD8 (Right Panel) versus CD194 (CCR4) 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

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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
555899	Lysing Buffer	100 ml	(none)
554656	Stain Buffer (FBS)	500 ml	(none)
557707	Alexa Fluor®647 Mouse Anti-Human CD4	100 tests	RPA-T4
555366	FITC Mouse Anti-Human CD8	100 tests	RPA-T8
561947	FITC Mouse Anti-Human CD8	25 tests	RPA-T8
561948	FITC Mouse Anti-Human CD8	500 tests	RPA-T8

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. 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/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.
9. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.

References

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