

Technical Data Sheet

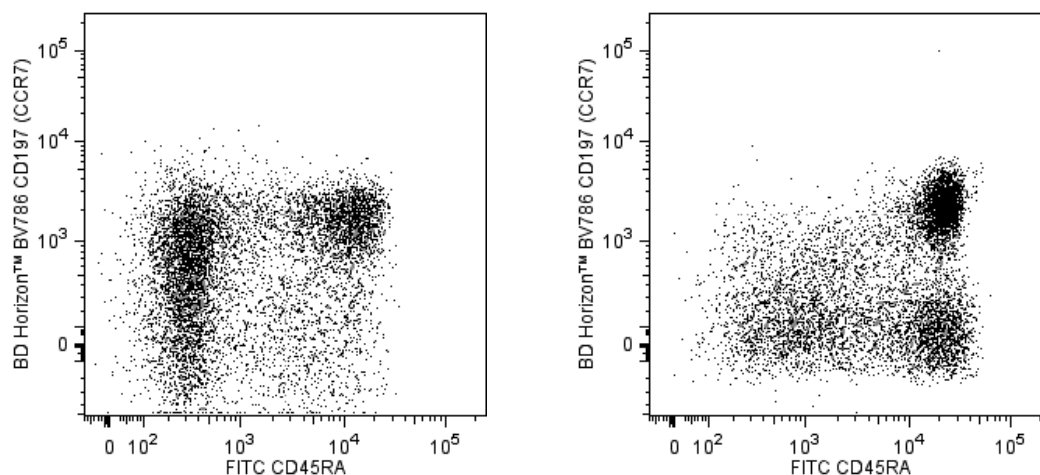
BV786 Rat Anti-Human CD197 (CCR7)**Product Information**

Material Number:	563710
Alternate Name:	CCR7, BLR-2, EBI-1, CMKBR7
Size:	50 tests
Vol. per Test:	5 µl
Clone:	3D12
Immunogen:	Human CCR7 protein
Isotype:	Rat IgG2a, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The monoclonal antibody 3D12 reacts with the human CC chemokine receptor, CCR7. CCR7 (previously known as BLR-2, EBI-1 and CMKBR7), a seven-transmembrane, G-protein-coupled receptor, is the specific receptor for CC chemokines, MIP-3β/Exodus 3/ELC/ CCL19 and 6CKine/Exodus 2/SLC/TCA4/CCL21. It has been shown that CCR7 mRNA is expressed mainly in lymphoid tissues including spleen, lymph nodes and tonsil. CCR7 mRNA was also detected in peripheral T and B lymphocytes, in bone marrow and cord blood CD34-positive cells and mature dendritic cells. The human CCR7 gene, unlike other CC chemokine receptor genes, has been mapped to chromosome 17q12. The immunogen used to generate 3D12 hybridoma was the N-terminus as well as parts of the second extracellular loop of human CCR7 protein. The monoclonal antibody 3D12 recognizes an epitope mapping to the N-terminus of human CCR7.

The antibody was conjugated to BD Horizon™ BV786 which is part of the BD Horizon™ Brilliant Violet™ family of dyes. This dye is a tandem fluorochrome of BD Horizon™ BV421 with an Ex Max of 405-nm and an acceptor dye with an Em Max at 786-nm. BD Horizon™ BV786 can be excited by the violet laser and detected in a filter used to detect Cy™7-like dyes (eg, 780/60-nm filter).



Multicolor flow cytometric analysis of CD197 (CCR7) and CD45RA coexpression patterns on CD4+ or CD8+ human peripheral blood lymphocytes. Human whole blood was stained with BD Horizon™ BV786 Rat Anti-Human CD197 (CCR7) (Cat. No. 563710), FITC Mouse Anti-Human CD45RA (Cat. No. 555488/561882), PerCP-Cy™5.5 Mouse Anti-Human CD4 (Cat. No. 560650), and Alexa Fluor® 647 Mouse Anti-Human CD8 (Cat. No. 557708) antibodies. Erythrocytes were lysed with BD FACS™ Lysing Solution (Cat. No. 349202). The two-color flow cytometric dot plots show the correlated expression patterns of CD45RA versus CD197 (CCR7) for CD4+ (Left Panel) or CD8+ (Right Panel) gated events with the forward and side light-scatter characteristics of intact 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™ BV786 under optimum conditions, and unconjugated antibody and free BD Horizon™ BV786 were removed.

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Application Notes

Application

Flow cytometry

Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 ml	(none)
563335	BV786 Rat IgG2a, κ Isotype Control	50 μ g	R35-95
555488	FITC Mouse Anti-Human CD45RA	100 tests	HI100
561882	FITC Mouse Anti-Human CD45RA	25 tests	HI100
560650	PerCP-Cy TM 5.5 Mouse Anti-Human CD4	50 tests	RPA-T4
557708	Alexa Fluor [®] 647 Mouse Anti-Human CD8	100 tests	RPA-T8
349202	BD FACST [™] Lysing Solution	100 ml	(none)
555899	Lysing Buffer	100 ml	(none)

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- μ l experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. 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.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
5. Cy is a trademark of Amersham Biosciences Limited.
6. Brilliant Violet[™] 421 is a trademark of Sirigen.
7. Brilliant Violet[™] 786 is a trademark of Sirigen.
8. Alexa Fluor[®] is a registered trademark of Molecular Probes, Inc., Eugene, OR.
9. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
10. Please refer to www.bdbiosciences.com/pharming/protocols for technical protocols.

References

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