Technical Data Sheet

V450 Mouse anti-Human CD197 (CCR7)

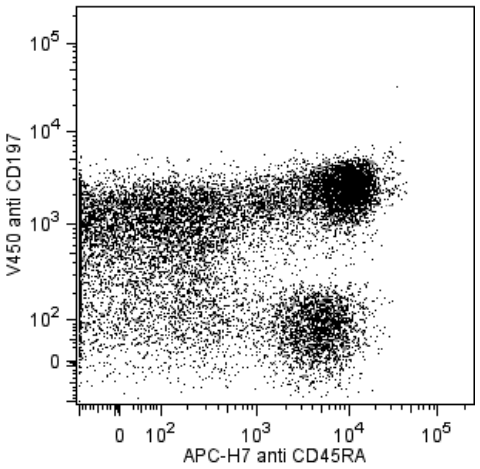
Product Information

Material Number:	**560863**
Alternate Name:	CC chemokine receptor 7; BLR2; CMKBR7; EBI1; EVI1; MIP-3 beta receptor
Size:	120 tests
Vol. per Test:	5 µl
Clone:	150503
Immunogen:	Human CCR7 Transfected Cell Line
Isotype:	Mouse IgG2a
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing protein stabilizer and ≤0.09% sodium azide.

Description

The monoclonal antibody 150503 specifically binds to the human CC chemokine receptor, CCR7, also known as CD197. CCR7 (previously known as BLR2, EBI1 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. CCR7 mRNA is expressed mainly in lymphoid tissues including spleen, lymph nodes and tonsil. CCR7 is expressed on peripheral T and B lymphocytes, by bone marrow and cord blood CD34-positive cells and by mature dendritic cells. Differential CCR7 expression can be used to distinguish naive, central memory and effector memory T cell subsets. The human *CCR7* gene, unlike other CC chemokine receptor genes, has been mapped to chromosome 17 (region 17q12).

The antibody is conjugated to BD Horizon™ V450, which has been developed for use in multicolor flow cytometry experiments and is available exclusively from BD Biosciences. It is excited by the Violet laser Ex max of 406 nm and has an Em Max at 450 nm. Conjugates with BD Horizon™ V450 can be used in place of Pacific Blue™ conjugates.



Flow cytometric analysis of CD197 (CCR7) on human peripheral blood lymphocytes. *Whole blood was stained with BD Horizon™ V450 Mouse Anti-Human CD197, BD Horizon™ V500 Mouse Anti-Human CD4 (clone RPA-T4, Cat. No. 560768) and APC-H7 Mouse Anti-Human CD45RA (clone HI100, Cat. No. 560674) antibodies. The erythrocytes were lysed with BD PharmLyse™ Lysing Buffer (Cat. No. 555899). A two-color flow cytometric dot plot showing the correlated expression patterns of CD45RA versus CD197 was derived from human CD4-positive T cell-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™ V450 under optimum conditions, and unreacted BD Horizon™ V450 was removed.

Application Notes

Application

Flow cytometry	Routinely Tested

BD Biosciences

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Suggested Companion Products

Catalog Number	Name	Size	Clone
560768	V500 Mouse Anti-Human CD4	100 tests	RPA-T4
560674	APC-H7 Mouse Anti-Human CD45RA	50 tests	HI100
555899	Lysing Buffer	100 ml	(none)
554656	Stain Buffer (FBS)	500 ml	(none)
560550	V450 Mouse IgG2a, κ Isotype Control	0.1 mg	G155-178

Product Notices

1. BD Horizon™ V450 has a maximum absorption of 406 nm and maximum emission of 450 nm. Before staining with this reagent, please confirm that your flow cytometer is capable of exciting the fluorochrome and discriminating the resulting fluorescence.
2. 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).
3. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
4. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
5. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.
6. 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.

References

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