

CD197 (CCR7) Monoclonal Antibody (3D12), Super Bright™ 645, eBioscience™

Product Details

Size	100 Tests
Species Reactivity	Human
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Super Bright™ 645, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	3D12
Conjugate	Super Bright™ 645
Excitation/Emission Max	414/645 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2744870

Applications

Flow Cytometry (Flow)

Tested Dilution

5 µL (1 µg)/test

Publications

5 Publications

Product Specific Information

Description: The 3D12 monoclonal antibody reacts with human CCR7, also known as EBI-1 and CD197. CCR7 is a member of the G-protein-coupled chemokine receptor family with seven membrane-spanning domains and functions as a receptor for 6Ckine/SLC (secondary lymphoid-tissue chemokine), CCL19 and CCL21. CCR7 has been shown to be internalized via clathrin-coated pits and the majority recycled back to the plasma membrane. CCR7 is expressed on T cells and can be used to distinguish populations of naive from central and effector memory T cells. CCR7 has been shown to play a role in migration of memory T cells to inflamed tissue. Expression of CCR7 is also found on DC's. During DC maturation CCR7 expression increases and is thought to be involved in a variety of functions: chemotaxis to the lymph node, cellular architecture, rate of endocytosis, survival and maturation. Expression of CCR7 on the cell surface can be down regulated upon ligand binding.

It is recommended that the staining incubation time be increased to at least 45 minutes at 2-8°C for optimal staining.

Applications Reported: This 3D12 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This 3D12 antibody has been pre-diluted and tested by flow cytometric analysis of normal human peripheral blood cells. This may be used at 5 µL (1 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells /test.

Super Bright 645 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 645 nm. We recommend using a 660/20 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

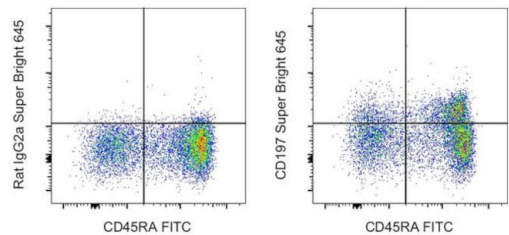
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 µL of cell sample + 100 µL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 405 nm; Emission: 645 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

Product Images For CD197 (CCR7) Monoclonal Antibody (3D12), Super Bright™ 645, eBioscience™



CD197 (CCR7) Antibody (64-1979-42) in Flow
Normal human peripheral blood cells were stained with CD45RA Monoclonal Antibody, FITC (Product # 11-0458-42) and Rat IgG2a kappa Isotype Control, Super Bright 645 (Product # 64-4321-82) (left) or CD197 (CCR7) Monoclonal Antibody, Super Bright 645 (right). Cells in the lymphocyte gate were used for analysis.

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5 References

Flow Cytometry (5)

Journal of inflammation research	Year 2022
Alteration of the Immune Microenvironment in HBsAg and HBeAg Dual-Positive Pregnant Women Presenting a High HBV Viral Load.	
"Published figure using CD197 (CCR7) monoclonal antibody (Product # 64-1979-42) in Flow Cytometry"	
Authors: Gao F,Wang H,Li X,Guo F,Yuan Y,Wang X,Zhang Y,Bai G	
Frontiers in immunology	Year 2021
Neuroimmune Consequences of eIF4E Phosphorylation on Chemotherapy-Induced Peripheral Neuropathy.	
"Published figure using CD197 (CCR7) monoclonal antibody (Product # 64-1979-42) in Flow Cytometry"	
Authors: Agalave NM,Mody PH,Szabo-Pardi TA,Jeong HS,Burton MD	

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