

CD197 (CCR7) Monoclonal Antibody (3D12), APC-eFluor 780, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human, Rhesus monkey
Host/Isotope	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), APC-eFluor 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	3D12
Conjugate	APC-eFluor® 780
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin, 0.2% BSA
Contains	0.09% sodium azide
Storage Conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_1518794

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (1 µg)/test	7 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.

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

Applications Tested: This 3D12 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can 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.

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

APC-eFluor 780 emits at 780 nm and is excited with the Red laser (633 nm). Please make sure that your instrument is capable of detecting this fluorochrome.

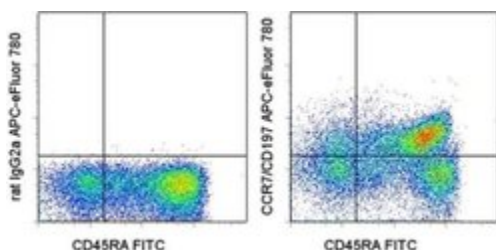
Light sensitivity: This tandem is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix /Lyse Solution (cat. 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: 633-647 nm; Emission: 780 nm; Laser: Red Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD197 (CCR7) Monoclonal Antibody (3D12), APC-eFluor 780, eBioscience™



CD197 (CCR7) Antibody (47-1979-42) in Flow

Staining of normal human peripheral blood cells with Anti-Human CD45RA FITC (Product # 11-0458-42) and Rat IgG2a K Isotype Control APC-eFluor® 780 (Product # 47-4321-82) (left) or Anti-Human CD197 (CCR7) APC-eFluor® 780 (right). Cells in the lymphocyte gate were used for analysis.

7 References

Flow Cytometry (7)

PLoS pathogens

Temporal Dynamics of CD8+ T Cell Effector Responses during Primary HIV Infection.

"47-1979 was used in Flow cytometry/Cell sorting to assess the CD8+ T cell functional evolution from primary to chronic HIV infection, demonstrating that progressive transcriptional dysregulation leads to the reduced CD8+ T cell perforin expression and loss of cytolytic potential characteristic of chronic HIV infection."

Authors: Demers KR, Makedonas G, Buggert M, Eller MA, Ratcliffe SJ, Goonetilleke N, Li CK, Eller LA, Rono K, Maganga L, Nitayaphan S, Kibuuka H, Routy JP, Slifka MK, Haynes BF, McMichael AJ, Bernard NF, Robb ML, Betts MR

Species
Human

Dilution
Not Cited

Year
2016

Journal of immunology (Baltimore, Md. : 1950)

Vaccine Induction of Lymph Node-Resident Simian Immunodeficiency Virus Env-Specific T Follicular Helper Cells in Rhesus Macaques.

"47-1979 was used in Flow cytometry/Cell sorting to quantify SIV Env-specific IL-21-producing T follicular helper cells in response to vaccination."

Authors: Vargas-Inchaustegui DA, Demers A, Shaw JM, Kang G, Ball D, Tuero I, Musich T, Mohanram V, Demberg T, Karpova TS, Li Q, Robert-Guroff M

Species
Rhesus monkey

Dilution
Not Cited

Year
2016

[View more Flow references on thermofisher.com](#)

More applications with references on thermofisher.com

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