CD197 (CCR7) Monoclonal Antibody (3D12), eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Human
Published Species	Non-human primate, Human, Mouse
Host/Isotype	Rat / IgG2a, kappa
Class	Monoclonal
Type	Antibody
Clone	3D12
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_842734

Applications	Tested Dilution	Publications
Immunohistochemistry (Paraffin) (IHC (P))	Assay-Dependent	1 Publication
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	0.5 µg/test	23 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 and immunohistology staining of paraffin embedded tissue sections.

Applications Tested: This 3D12 antibody has been tested by flow cytometric analysis of human peripheral blood cells. This can be used at less than or equal to 0.5 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 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

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

Purity: Greater than 90%, as determined by SDS-PAGE.

Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

25 References

Immunohistochemistry (Paraffin) (1)

The journal of histochemistry and cytochemistry : official journal of the Histochemistry Society

The Diagnostic Value of Chemokine/Chemokine Receptor Pairs in Hepatocellular Carcinoma and Colorectal Liver Metastasis.

"14-1979 was used in Immunohistochemistry on paraffin embedded tissues to investigate the roles of chemokines and their receptors in the progression of primary and metastatic malignant liver tumors and their prognosis."

Authors: Jiao X,Shu G,Liu H,Zhang Q,Ma Z,Ren C,Guo H,Shi J,Liu J,Zhang C,Wang Y,Gao Y

Year
2019

Species
Human

Dilution
1:100

Immunocytochemistry (1)

BMC immunology

Monocyte differentiation and macrophage priming are regulated differentially by pentraxins and their ligands.

"14-1979 was used in Immunocytochemistry to suggest that the presence of pentraxins and their ligands regulate macrophage differentiation in the blood and tissues."

Authors: Pilling D,Galvis-Carvajal E,Karhadkar TR,Cox N,Gomer RH

Year
2017

Species
Human

Flow Cytometry (23)

Journal of inflammation research

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 # 14-1979-82) in Flow Cytometry"

Authors: Gao F,Wang H,Li X,Guo F,Yuan Y,Wang X,Zhang Y,Bai G

Year
2022

Frontiers in immunology

Neuroimmune Consequences of eIF4E Phosphorylation on Chemotherapy-Induced Peripheral Neuropathy.

"Published figure using CD197 (CCR7) monoclonal antibody (Product # 14-1979-82) in Flow Cytometry"

Authors: Agalave NM,Mody PH,Szabo-Pardi TA,Jeong HS,Burton MD

Year
2021

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More applications with references on thermofisher.com

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