

## PE anti-human CD197 (CCR7) Antibody

<b>Catalog# / Size</b>	353203 / 25 tests 353204 / 100 tests
<b>Clone</b>	G043H7
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	BLR2, CDw197, EBI1, CMKBR7
<b>Isotype</b>	Mouse IgG2a, κ
<b>Description</b>	CCR7, also known as CD197, is a chemokine receptor that binds CCL19 and CCL21. CCR7 and its ligands link innate and adaptive immunity by affecting interactions between T cells and dendritic cells and their downstream effect. Naïve T cells enter the lymph node through high endothelial venules, which express CCL21. Dendritic cells and macrophages enter the lymph node through afferent lymphatics. The encounter of T cells and dendritic cells in the T cell zone is CCR7-dependent. In addition, during immunological surveillance, B cells recirculate between B-cell-rich compartments (follicles or B cell zones) in secondary lymphoid organs, surveying for antigen. After antigen binding, B cells move to the boundary of B and T zones to interact with T-helper cells; this B cell migration is directed by CCR7 and its ligands. CCR7-positive cancer cell expression has been associated with lymph node metastasis.

### Product Details

---

<b>Verified Reactivity</b>	Human
<b>Reported Reactivity</b>	African Green, Baboon, Cynomolgus, Rhesus
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	CCR7-transfected cells
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.
<b>Excitation Laser</b>	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
<b>Product Citations</b>	<ol style="list-style-type: none"> <li>Aschmoneit N, <i>et al.</i> 2021. J Immunother Cancer. 9: <a href="#">PubMed</a></li> <li>Rendeiro AF, <i>et al.</i> 2020. Nat Commun. 11:577. <a href="#">PubMed</a></li> <li>Li M, <i>et al.</i> 2022. Sci Rep. 12:378. <a href="#">PubMed</a></li> <li>Zeng W, <i>et al.</i> 2017. Front Immunol. 0.806944444. <a href="#">PubMed</a></li> <li>Zhou R, <i>et al.</i> 2020. Immunity. S1074-7613(20)30333-2.. <a href="#">PubMed</a></li> <li>Acharya N, <i>et al.</i> 2020. Immunity. 53(3):658-671.e6. <a href="#">PubMed</a></li> <li>Kubo M, <i>et al.</i> 2018. Oncol Rep. 39:417. <a href="#">PubMed</a></li> <li>Kramer KJ, <i>et al.</i> 2022. Nat Commun. 13:3466. <a href="#">PubMed</a></li> <li>Xiong X, <i>et al.</i> 2021. Liver Int. 41:1033. <a href="#">PubMed</a></li> <li>Cappellano G, <i>et al.</i> 2018. PLoS One. 13:e0192108. <a href="#">PubMed</a></li> <li>Kang L, <i>et al.</i> 2020. Exp Hematol Oncol. 9:11. <a href="#">PubMed</a></li> </ol>

12. Tatovic D, *et al.* 2015. *J Immunol.* 195: 386 - 392. [PubMed](#)
13. Zhang X, *et al.* 2021. *Nat Commun.* 12:5291. [PubMed](#)
14. Gullà A, *et al.* 2021. *Cancer Discov.* . [PubMed](#)
15. Aschmoneit N, *et al.* 2022. *Oncoimmunology.* 11:2028961. [PubMed](#)
16. Balan I, *et al.* 2022. *Front Immunol.* 13:940095. [PubMed](#)
17. Kuo HH, *et al.* 2018. *Immunity.* 48:1183. [PubMed](#)
18. Alhaj Hussien K, *et al.* 2017. *Immunity.* 47:680. [PubMed](#)
19. Ahmad S, *et al.* 2017. *Prog Neuropsychopharmacol Biol Psychiatry.* . 10.1016/j.pnpbp.2017.10.001. [PubMed](#)
20. Wu J *et al.* 2019. *Immunity.* 50(5):1218-1231 . [PubMed](#)
21. Magri G *et al.* 2017. *Immunity.* 47(1):118-134 . [PubMed](#)
22. Aschmoneit N, *et al.* 2021. *Sci Rep.* 11:13880. [PubMed](#)
23. Vadrevu KM, *et al.* 2022. *Sci Rep.* 12:12038. [PubMed](#)
24. Borowicz S, *et al.* 2021. *PLOS ONE.* 16(6):e0252197. [PubMed](#)
25. Usmani SM *et al.* 2019. *Cell host & microbe.* 25(1):73-86 . [PubMed](#)
26. Christiansen M, *et al.* 2020. *Front Immunol.* 10:3022. [PubMed](#)
27. Tavira B, *et al.* 2018. *J Diabetes Res.* 2018:9391845. [PubMed](#)
28. Audigé A, *et al.* 2017. *BMC Immunology.* 10.1186/s12865-017-0209-9. [PubMed](#)
29. Ramos MIP, *et al.* 2021. *Elife.* 10: . [PubMed](#)
30. Hirschberger S, *et al.* 2021. *EMBO Mol Med.* 13:e14323. [PubMed](#)
31. Collins PL *et al.* 2018. *Cell.* 176(1-2):348-360 . [PubMed](#)
32. Chen Y, *et al.* 2020. *Cell.* 1496:183. [PubMed](#)
33. Montel-Hagen A *et al.* 2019. *Cell stem cell.* 24(3):376-389 . [PubMed](#)
34. Gullà A, *et al.* 2021. *Cancer Discov.* 2:468. [PubMed](#)
35. Chen R, *et al.* 2021. *Front Oncol.* 11:743050. [PubMed](#)
36. Gamradt S, *et al.* 2021. *iScience.* 24:103312. [PubMed](#)

**RRID** AB\_10916391 (BioLegend Cat. No. 353203)  
 AB\_10913813 (BioLegend Cat. No. 353204)

## Antigen Details

---

<b>Structure</b>	Chemokine receptor, G protein-coupled receptors (GPCR), seven transmembrane receptor.
<b>Distribution</b>	T cells, B cells, NK, dendritic cells.
<b>Function</b>	The chemokine receptor CCR7 plays a pivotal role in the homing of naïve T cells and regulatory T cells to secondary lymphoid organs, and the migration of dendritic cells into afferent lymphatic vessels.
<b>Ligand/Receptor</b>	CCL19 and CCL21.
<b>Cell Type</b>	B cells, Dendritic cells, NK cells, T cells
<b>Biology Area</b>	Immunology
<b>Molecular Family</b>	CD Molecules, Cytokine/Chemokine Receptors, GPCR
<b>Antigen References</b>	<ol style="list-style-type: none"> <li>1. Yanagihara S, <i>et al.</i> 1998. <i>J. Immunol.</i> 161:3096.</li> <li>2. Charo IF, <i>et al.</i> 2006. <i>N. Engl. J. Med.</i> 354:610.</li> <li>3. Reif K, <i>et al.</i> 2002. <i>Nature</i> 416:94.</li> <li>4. Nakata B, <i>et al.</i> 2008. <i>Oncology</i> 74:69.</li> <li>5. Brodie T. <i>et al.</i> 2013. <i>Cytometry A.</i> 6: 530-2. <a href="#">PubMed</a></li> <li>6. Graves A.J. <i>et al.</i> 2014. <i>Cytometry A.</i> 7: 576–9 <a href="#">PubMed</a></li> <li>7. Moncunill G. <i>et al.</i> 2014. <i>Cytometry A.</i> 12: 995-8 <a href="#">PubMed</a></li> </ol>
<b>Gene ID</b>	<a href="#">1236</a>

## Related Protocols

---

[Cell Surface Flow Cytometry Staining Protocol](#)

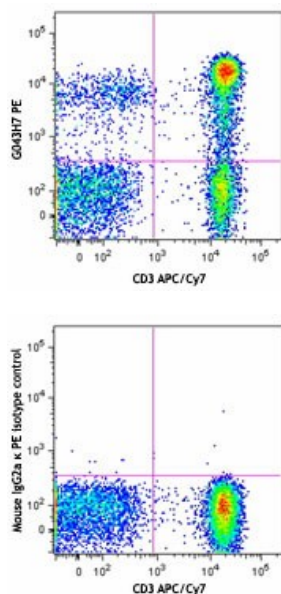
## Other Formats

---

Purified anti-human CD197 (CCR7), Alexa Fluor® 488 anti-human CD197 (CCR7), Brilliant Violet 421™ anti-human CD197 (CCR7), PE anti-human CD197 (CCR7), APC/Cyanine7 anti-human CD197 (CCR7), Pacific Blue™ anti-human CD197 (CCR7), APC anti-human CD197 (CCR7), FITC anti-human CD197 (CCR7), Alexa Fluor® 647 anti-human CD197 (CCR7), PerCP/Cyanine5.5 anti-human CD197 (CCR7), Brilliant Violet 605™ anti-human CD197 (CCR7), PE/Cyanine7 anti-human CD197 (CCR7), Brilliant Violet

711™ anti-human CD197 (CCR7), Brilliant Violet 785™ anti-human CD197 (CCR7), Brilliant Violet 510™ anti-human CD197 (CCR7), Brilliant Violet 650™ anti-human CD197 (CCR7), PE/Dazzle™ 594 anti-human CD197 (CCR7), Biotin anti-human CD197 (CCR7), Purified anti-human CD197 (CCR7) (Maxpar® Ready), PerCP anti-human CD197 (CCR7), Alexa Fluor® 700 anti-human CD197 (CCR7), APC/Fire™ 750 anti-human CD197 (CCR7), TotalSeq™-A0148 anti-human CD197 (CCR7), TotalSeq™-B0148 anti-human CD197 (CCR7), TotalSeq™-C0148 anti-human CD197 (CCR7), Brilliant Violet 750™ anti-human CD197 (CCR7), UltraLEAF™ Purified anti-human CD197 (CCR7), Spark NIR™ 685 anti-human CD197 (CCR7), KIRAVIA Blue 520™ anti-human CD197 (CCR7), PE/Fire™ 640 anti-human CD197 (CCR7), Spark YG™ 581 anti-human CD197 (CCR7), APC/Fire™ 810 anti-human CD197 (CCR7) Antibody, TotalSeq™-D0148 anti-human CD197 (CCR7), PE/Fire™ 810 anti-human CD197 (CCR7) Antibody, PE/Cyanine5 anti-human CD197 (CCR7)

## Product Data



Human peripheral blood lymphocytes were stained with CD3 APC/Cy7 and CCR7/CD197 (clone G043H7) PE (top) or mouse IgG2a, κ PE isotype control (bottom).

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

\*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, [www.biolegend.com/ordering#license](http://www.biolegend.com/ordering#license)). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 [www.biolegend.com](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587