

## APC anti-human CD193 (CCR3) Antibody

<b>Catalog# / Size</b>	310707 / 25 tests 310708 / 100 tests
<b>Clone</b>	5E8
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	CC CKR3, MIP1-alpha receptor like-2, eotaxin receptor, CD193, CCR3
<b>Isotype</b>	Mouse IgG2b, $\kappa$
<b>Description</b>	CD193, also known as CC-chemokine receptor 3 (CCR3), CC CKR3, MIP1-alpha receptor like-2, and eotaxin receptor, is a member of the G protein-coupled seven transmembrane receptors family. It binds to the CC chemokines eotaxin, eotaxin-2, and eotaxin-3 with high affinity. CCR3 has also been reported to bind RANTES, MCP-3, and MCP-4 with low affinity. CCR3 receptor is expressed on human eosinophils, basophils, mast cells, mononuclear phagocytes, platelets, CD34 <sup>+</sup> hematopoietic progenitor cells, Th2-like lymphocytes, and keratinocytes. CCR3 is thought to play a role in allergic diseases such as bronchial asthma and allergic rhinitis. CCR3 is a co-receptor for HIV-1 and HIV-2, and the binding of eotaxin with CCR3 has been shown to inhibit HIV infection in some cell types.

### Product Details

---

<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<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 APC 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 $\mu$ l per million cells in 100 $\mu$ l staining volume or 5 $\mu$ l per 100 $\mu$ l of whole blood.
<b>Excitation Laser</b>	Red Laser (633 nm)
<b>Application Notes</b>	Additional reported applications (for the relevant formats) include: The 5E8 antibody is useful for immunofluorescent staining and flow cytometric analysis of CCR3 expression.  It has been observed that the 5E8 antibody clone can interact with PE/Cy7 antibody conjugates during multi-color staining, potentially leading to unwanted staining. This interaction can be resolved by sequentially staining with the 5E8 antibody first and then followed by the PE/Cy7 conjugate of interest.
<b>Application References</b> (PubMed link indicates BioLegend citation)	1. Beauvillian C, <i>et al.</i> 2011. <i>Blood</i> 117:1196. <a href="#">PubMed</a>
<b>Product Citations</b>	1. Sharma N, <i>et al.</i> 2019. <i>Front Immunol.</i> 10:1020. <a href="#">PubMed</a> 2. Markov SD, <i>et al.</i> 2021. <i>Mol Cancer Ther.</i> 20:2457. <a href="#">PubMed</a> 3. Shopova IA, <i>et al.</i> 2020. <i>MBio.</i> 11: <a href="#">PubMed</a> 4. Li H, <i>et al.</i> 2015. <i>Reproduction.</i> 150: 417-427. <a href="#">PubMed</a>

**RRID** AB\_1134156 (BioLegend Cat. No. 310707)  
AB\_2228976 (BioLegend Cat. No. 310708)

## Antigen Details

---

<b>Structure</b>	G-protein coupled seven transmembrane domain receptor, 356 amino acids
<b>Distribution</b>	Eosinophils, basophils, mast, mononuclear phagocytes, platelets, CD34 <sup>+</sup> hematopoietic progenitor, Th2, keratinocytes
<b>Function</b>	Co-receptor for HIV-1 and HIV-2, allergy
<b>Receptors</b>	Eotaxin, eotaxin-2, eotaxin-3
<b>Cell Type</b>	Eosinophils, Erythrocytes, Hematopoietic stem and progenitors, Macrophages, Mast cells, Thymocytes
<b>Biology Area</b>	Immunology
<b>Molecular Family</b>	CD Molecules, Cytokine/Chemokine Receptors, GPCR
<b>Antigen References</b>	1. Gerard W, <i>et al.</i> 1996. <i>J. Exp. Med.</i> 183:2437. 2. Ugucioni C, <i>et al.</i> 1997. <i>J. Clin. Invest.</i> 100:1137. 3. Sallusto F, <i>et al.</i> 1997. <i>Science.</i> 277:2005. 4. Loetscher P, <i>et al.</i> 2001. <i>J. Biol. Chem.</i> 276:2986.
<b>Regulation</b>	Upregulated by high affinity Fc IgE receptor ligation (mast cells), RANTES (keratinocytes), IFN $\gamma$ (monocytes, neutrophils), HIV tat protein (basophils), IL-3, IL-5 and GM-CSF (CD34 <sup>+</sup> progenitor cells), IL-2 and IL-4(T cells). Downregulated by IL-
<b>Gene ID</b>	<a href="#">1232</a>

## Related Protocols

---

[Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

---

Purified anti-human CD193 (CCR3), PE anti-human CD193 (CCR3), Brilliant Violet 605™ anti-human CD193 (CCR3), APC anti-human CD193 (CCR3), Alexa Fluor® 647 anti-human CD193 (CCR3), APC/Cyanine7 anti-human CD193 (CCR3), Brilliant Violet 421™ anti-human CD193 (CCR3), PerCP/Cyanine5.5 anti-human CD193 (CCR3), FITC anti-human CD193 (CCR3), Brilliant Violet 510™ anti-human CD193 (CCR3), Biotin anti-human CD193 (CCR3), APC/Fire™ 750 anti-human CD193 (CCR3), PE/Dazzle™ 594 anti-human CD193 (CCR3), TotalSeq™-A0397 anti-human CD193 (CCR3), TotalSeq™-C0397 anti-human CD193 (CCR3), Brilliant Violet 711™ anti-human CD193 (CCR3) Antibody, TotalSeq™-D0397 anti-human CD193 (CCR3)

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