

## Purified anti-human CD193 (CCR3) Antibody

<b>Catalog# / Size</b>	310702 / 100 µg
<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, κ
<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

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<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.
<b>Preparation</b>	The antibody was purified by affinity chromatography.
<b>Concentration</b>	0.5 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C.
<b>Application</b>	<a href="#">FC - Quality tested</a> <a href="#">IHC-P - Verified</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 ≤2.0 µg per million cells in 100 µl volume. For immunohistochemistry on paraffin-embedded tissue, a concentration range of 5.0 - 10.0 µg/ml is suggested. It is recommended that the reagent be titrated for optimal performance for each application.
<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>	1. Beauvillian C, <i>et al.</i> 2011. <i>Blood</i> 117:1196. <a href="#">PubMed</a>
<b>(PubMed link indicates BioLegend citation)</b>	
<b>Product Citations</b>	1. O'Boyle KC, <i>et al.</i> 2020. <i>Methods Mol Biol.</i> 2111:1. <a href="#">PubMed</a> 2. Olin A, <i>et al.</i> 2018. <i>Cell.</i> 174:1277. <a href="#">PubMed</a> 3. Evrard M <i>et al.</i> 2018. <i>Immunity.</i> 48(2):364-379 . <a href="#">PubMed</a> 4. Lakshmikanth T, <i>et al.</i> 2020. <i>Cell Reports.</i> 32(3):107923. <a href="#">PubMed</a> 5. Beauvillain C, <i>et al.</i> 2011. <i>Blood.</i> 117:1196. <a href="#">PubMed</a> 6. Lavin Y <i>et al.</i> 2017. <i>Cell.</i> 169(4):750-765 . <a href="#">PubMed</a>

## Antigen Details

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<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>	<ol style="list-style-type: none"><li>1. Gerard W, <i>et al.</i> 1996. <i>J. Exp. Med.</i> 183:2437.</li><li>2. Ugucioni C, <i>et al.</i> 1997. <i>J. Clin. Invest.</i> 100:1137.</li><li>3. Sallusto F, <i>et al.</i> 1997. <i>Science.</i> 277:2005.</li><li>4. Loetscher P, <i>et al.</i> 2001. <i>J. Biol. Chem.</i> 276:2986.</li></ol>
<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

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[Cell Surface Flow Cytometry Staining Protocol](#)

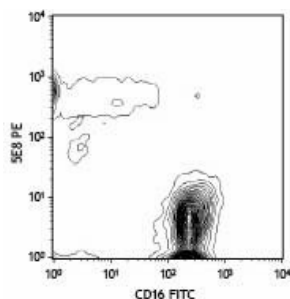
## Other Formats

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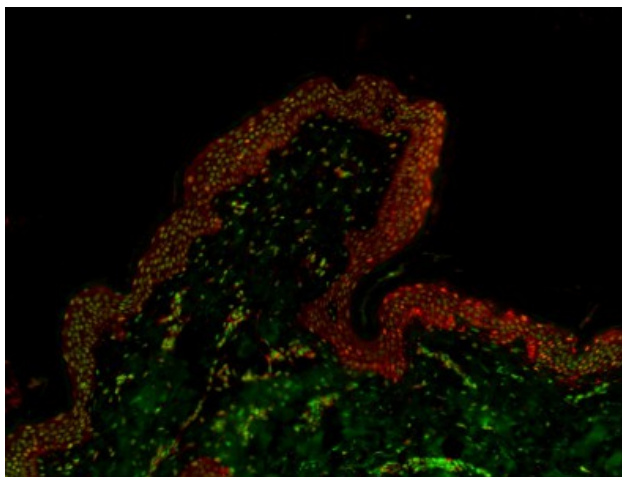
Purified anti-human CD193 (CCR3), PE anti-human CD193 (CCR3), Brilliant Violet 605™ anti-human CD193 (CCR3), APC anti-human CD193 (CCR3), Alexa Fluor® 647 anti-human CD193 (CCR3), APC/Cyanine7 anti-human CD193 (CCR3), Brilliant Violet 421™ anti-human CD193 (CCR3), PerCP/Cyanine5.5 anti-human CD193 (CCR3), 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)

## Product Data

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Human peripheral blood granulocytes stained with 5E8 PE and CD16 FITC



Human paraffin-embedded skin tissue slices were prepared with a standard protocol of deparaffinization and rehydration. Antigen retrieval was done with Citrate Buffered 1X (10mM, pH 6.0) at 95°C for 40 minutes. Tissue was washed with PBS/0.05% Tween 20 twice for five minutes and blocked with 5% FBS and 0.2% gelatin for 30 minutes. Then, the tissue was stained with 10 µg/mL of Purified anti-human CD193 (CCR3) Antibody (Clone 5E8) antibody (red) at 4°C overnight. The nuclei were counter-stained with DAPI (blue). The image was scanned with a 10X objective and stitched with MetaMorph® software.

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