

## PE/Fire™ 744 anti-human CD194 (CCR4) Antibody

<b>Catalog# / Size</b>	359449 / 25 tests 359450 / 100 tests
<b>Clone</b>	L291H4
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	CKR4, K5-5, CMKBR4, ChemR13, CC-CKR-4, MGC88293, HGCN:14099
<b>Isotype</b>	Mouse IgG1, κ
<b>Description</b>	CD194, also known as CCR4, is a CC chemokine receptor. It binds CCL17 and CCL22 and is expressed on a subset of T and B cells, basophils, monocytes, and NK cells. Human Th2 cells are characterized by the expression of CCR4 and CCR8, and these receptors are regulated differently during Th2 development. Human peripheral blood Tregs can be divided into two distinct populations based on the expression of CCR4. Freshly isolated Tregs express CCR4 and presumably represent memory-type Tregs, and CCR4 <sup>-</sup> Tregs require CD3-mediated activation to acquire a regulatory activity. Depletion of CCR4 <sup>+</sup> T cells leads to Th1-type polarization of CD4 <sup>+</sup> T cells and augmentation of CD8 <sup>+</sup> T cell responses to tumor antigens. CCR4 and its ligands are important for the recruitment of memory T cells into the skin in various cutaneous immune diseases.

### Product Details

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<b>Verified Reactivity</b>	Human
<b>Reported Reactivity</b>	Cynomolgus
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Human CCR4 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/Fire™ 744 under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our <a href="#">Certificate of Analysis</a> online tool.)
<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>	<p>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. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>True-Stain Monocyte Blocker™ (Cat No. 426102) is recommended to minimize non-specific staining of PE/Fire™ 744 on monocytes and macrophages.</p> <p>* PE/Fire™ 744 has a maximum excitation of 565 nm and a maximum emission of 744 nm.</p>
<b>Excitation Laser</b>	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
<b>RRID</b>	AB_3699002 (BioLegend Cat. No. 359449) AB_3699002 (BioLegend Cat. No. 359450)

## Antigen Details

<b>Structure</b>	GPCR, seven transmembrane receptor
<b>Distribution</b>	Expressed on a subset of T and B cells, basophils, monocytes, NK cells
<b>Function</b>	Migration of inflammatory and regulatory cells to the target tissues
<b>Ligand/Receptor</b>	CCL17 and CCL22
<b>Cell Type</b>	B cells, Basophils, Embryonic Stem Cells, Monocytes, NK cells, T cells, Tregs
<b>Biology Area</b>	Immunology, Innate Immunity, Stem Cells
<b>Molecular Family</b>	CD Molecules, Cytokine/Chemokine Receptors, GPCR
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Katschke KJ, <i>et al.</i> 2001 <i>Arthritis Rheum.</i> 44:1022.</li><li>2. Colantonio L, <i>et al.</i> 2002 <i>Eur. J. Immunol.</i> 32:1264.</li><li>3. Jakubzick C <i>et al.</i> 2004 <i>Am. J. Pathol.</i> 165:1211.</li><li>4. Morimoto Y, <i>et al.</i> 2005 <i>J. Leukoc. Biol.</i> 78:753.</li><li>5. Baatar J, <i>et al.</i> 2007 <i>J. Immunol.</i> 178:4891.</li><li>6. Kusumoto M, <i>et al.</i> 2007 <i>J. Interferon. Cytokine Res.</i> 27:901.</li></ol>
<b>Gene ID</b>	<a href="#">1233</a>

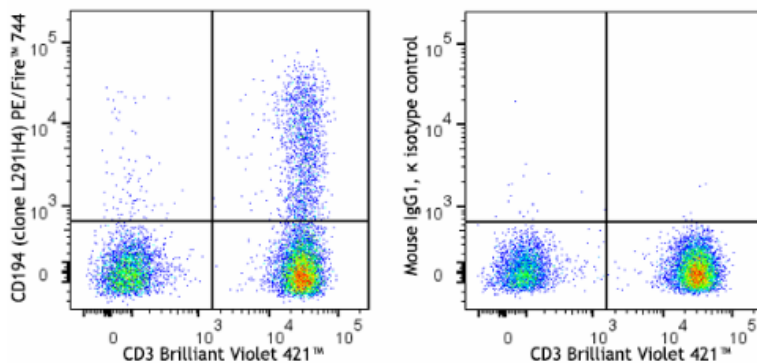
## Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

PerCP/Cyanine5.5 anti-human CD194 (CCR4), Purified anti-human CD194 (CCR4), Alexa Fluor® 647 anti-human CD194 (CCR4), APC anti-human CD194 (CCR4), PE/Cyanine7 anti-human CD194 (CCR4), PE anti-human CD194 (CCR4), Brilliant Violet 421™ anti-human CD194 (CCR4), Brilliant Violet 510™ anti-human CD194 (CCR4), Brilliant Violet 605™ anti-human CD194 (CCR4), PE/Dazzle™ 594 anti-human CD194 (CCR4), Biotin anti-human CD194 (CCR4), TotalSeq™-A0071 anti-human CD194 (CCR4), TotalSeq™-C0071 anti-human CD194 (CCR4), TotalSeq™-B0071 anti-human CD194 (CCR4), APC/Fire™ 750 anti-human CD194 (CCR4) Antibody, PE/Fire™ 810 anti-human CD194 (CCR4) Antibody, PE/Fire™ 700 anti-human CD194 (CCR4), TotalSeq™-D0071 anti-human CD194 (CCR4), KIRAVIA Blue 520™ anti-human CD194 (CCR4), APC/Fire™ 810 anti-human CD194 (CCR4), PerCP/Fire™ 780 anti-human CD194 (CCR4), Alexa Fluor® 700 anti-human CD194 (CCR4), PerCP/Fire™ 806 anti-human CD194 (CCR4), Spark Red™ 718 anti-human CD194 (CCR4) (Flexi-Fluor™), Brilliant Violet 785™ anti-human CD194 (CCR4), PE/Fire™ 744 anti-human CD194 (CCR4) Antibody

## Product Data



Human peripheral blood lymphocytes were stained with anti-human CD3 (clone UCHT1) Brilliant Violet 421™ and anti-human CD194 (CCR4) (clone L291H4) PE/Fire™ 744 or mouse IgG1, κ PE/Fire™ 744 isotype control (right).

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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