

## TotalSeq™-A0376 anti-mouse CD195 (CCR5) Antibody

<b>Catalog# / Size</b>	107019 / 10 µg
<b>Clone</b>	HM-CCR5
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	CCR5, C-C chemokine receptor type 5, HIV-1 fusion co-receptor
<b>Isotype</b>	Armenian Hamster IgG
<b>Barcode Sequence</b>	ACCAGTTGTCATTAC
<b>Description</b>	CD195 is a 45 kD chemokine receptor also known as CCR5. CD195 is a seven transmembrane-spanning G protein-associated molecule expressed on macrophages, a T cell subset, and in the heart, liver, and spleen. CD195 regulates lymphocyte chemotaxis and transendothelial migration during inflammatory processes. CD195 interacts with several ligands including RANTES, MCP-1, MIP-1 $\alpha$ , and MIP-1 $\beta$ .

### Product Details

<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Armenian Hamster
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 1 mM EDTA.
<b>Preparation</b>	The antibody was purified by chromatography and conjugated with TotalSeq™-A oligomer under optimal conditions.
<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>Do not freeze.</b>
<b>Application</b>	<a href="#">PG - 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> and the oligomer sequence is confirmed by sequencing. TotalSeq™-A antibodies are compatible with 10x Genomics Single Cell Gene Expression <a href="#">Solutions</a>.</p> <p>To maximize performance, it is strongly recommended that the reagent be titrated for each application, and that you centrifuge the antibody dilution before adding to the cells at 14,000xg at 2 - 8°C for 10 minutes. Carefully pipette out the liquid avoiding the bottom of the tube and add to the cell suspension. For Proteogenomics analysis, the suggested starting amount of this reagent for titration is <math>\leq 1.0</math> µg per million cells in 100 µL volume. Refer to the corresponding TotalSeq™ protocol for specific staining instructions.</p> <p>Buyer is solely responsible for determining whether Buyer has all intellectual property rights that are necessary for Buyer's intended uses of the BioLegend TotalSeq™ products. For example, for any technology platform Buyer uses with TotalSeq™, it is Buyer's sole responsibility to determine whether it has all necessary third party intellectual property rights to use that platform and TotalSeq™ with that platform.</p>
<b>Application Notes</b>	CCR5 is expressed at low density on activated cells. For successful immunofluorescent staining results, it may be important to maximize signal over background by using a relatively bright fluorochrome-antibody conjugate (Cat. No. 107006) or by using a high sensitivity, three-layer staining technique (e.g., including a biotinylated antibody (Cat. No. 107004) or biotinylated anti-Armenian hamster IgG (Cat. No. 405501) second step, followed by SA <sub>v</sub> -PE (Cat. No. 405204)).
<b>Additional Product Notes</b>	<p>TotalSeq™ reagents are designed to profile protein levels at a single cell level following an optimized protocol similar to the CITE-seq workflow. A compatible single cell device (e.g. <a href="#">10x Genomics Chromium System and Reagents</a>) and sequencer (e.g. Illumina analyzers) are required. Please contact <a href="#">technical support</a> for more information, or visit <a href="http://biolegend.com/totalseq">biolegend.com/totalseq</a>.</p> <p>The barcode flanking sequences are CCTTGGCACCCGAGAATTCCA (PCR handle), and</p>

BAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA\*A\*A (capture sequence). B represents either C, G, or T, and \* indicates a phosphorothioated bond, to prevent nuclease degradation.

View more applications data for this product in our [Scientific Poster Library](#).

## Application References

(PubMed link indicates BioLegend citation)

1. Mao A, *et al.* 2005. *J. Immunol.* 175:5146. (FC) [PubMed](#)
2. Ishida Y, *et al.* 2007. *Am J Pathol.* 170:843. (FC) [PubMed](#)
3. Zeiser Z, *et al.* 2008. *Blood* 111:453. (FC) [PubMed](#)
4. Sharma R, *et al.* 2009. *J. Immunol.* 183:3212 (FC) [PubMed](#)
5. Kohlmeier JE, *et al.* 2008. *Immunity.* 29:101. (FC) [PubMed](#)

RRID AB\_2783049 (BioLegend Cat. No. 107019)

## Antigen Details

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<b>Structure</b>	$\beta$ -chemokine receptor, 45 kD
<b>Distribution</b>	Macrophages, T cell subset, heart, spleen, liver
<b>Function</b>	Lymphocyte chemotaxis and transendothelial migration during inflammation, signaling through seven transmembrane-spanning G proteins
<b>Ligand/Receptor</b>	RANTES, MCP-1, MIP-1 $\alpha$ , and MIP-1 $\beta$
<b>Cell Type</b>	Macrophages, T cells, Dendritic cells
<b>Biology Area</b>	Immunology, Innate Immunity
<b>Molecular Family</b>	CD Molecules, Cytokine/Chemokine Receptors, GPCR
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Barclay AN, <i>et al.</i> 1997. <i>The Leukocyte Antigen FactsBook</i> Academic Press.</li><li>2. Napolitano M, <i>et al.</i> 1990. <i>J. Exp. Med.</i> 172:285.</li><li>3. Meyer A, <i>et al.</i> 1996. <i>J. Biol. Chem.</i> 271:14445.</li><li>4. Boring, <i>et al.</i> 1996. <i>J. Biol. Chem.</i> 271:7551.</li></ol>
<b>Gene ID</b>	<a href="#">12774</a>

## Related Protocols

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[TotalSeq™-A Antibodies and Cell Hashing with 10x Single Cell 3' Reagent Kit v3 3.1 Protocol](#)

## Other Formats

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Biotin anti-mouse CD195 (CCR5), PE anti-mouse CD195 (CCR5), Alexa Fluor® 488 anti-mouse CD195 (CCR5), Alexa Fluor® 647 anti-mouse CD195 (CCR5), APC anti-mouse CD195 (CCR5), PerCP/Cyanine5.5 anti-mouse CD195 (CCR5), PE/Cyanine7 anti-mouse CD195 (CCR5), TotalSeq™-A0376 anti-mouse CD195 (CCR5)

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