

## FITC anti-human CD195 (CCR5) Antibody

<b>Catalog# / Size</b>	313705 / 25 tests
<b>Clone</b>	HEK1/85a
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	CCR5, C-C chemokine receptor type 5, HIV-1 fusion co-receptor
<b>Isotype</b>	Rat IgG2a, $\kappa$
<b>Description</b>	CD195, also known as CCR5, is a 45 kD G protein-coupled seven transmembrane CC-chemokine receptor. It binds to MIP-1 $\alpha$ , MIP-1 $\beta$ , and RANTES and is expressed on a subset of T cells and monocytes. CD195 mediates an intracellular signal thought to induce cell differentiation and proliferation. CCR5 has also been shown to act as a co-receptor for R5 HIV-1 cell entry; modification of CCR5 by sulfation contributes to the efficiency of HIV-1 entry. Recent studies have shown CCR5 to play a role in a variety of other human diseases, ranging from infectious and inflammatory diseases to cancer.

### Product Details

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<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	CHO cells transfected with human CCR5
<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 FITC 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>Application Notes</b>	Additional reported applications (for the relevant formats) include: immunofluorescence microscopy <sup>1</sup>  <b>Clone HEK1/85a and clone HEK1/85a/7a are the same.</b>
<b>Application References</b>	1. Mueller A, <i>et al.</i> 2002. <i>Blood</i> 99:785. 2. Al-Odi E, <i>et al.</i> 2012. <i>PLoS One</i> . 7:e42217. <a href="#">PubMed</a> 3. Osman A, <i>et al.</i> 2014. <i>J Immunol</i> . 192:5083. <a href="#">PubMed</a> 4. Liu S, <i>et al.</i> 2014. <i>Virus Res</i> . 192:92. <a href="#">PubMed</a>
<b>(PubMed link indicates BioLegend citation)</b>	
<b>Product Citations</b>	1. Liu S, <i>et al.</i> 2014. <i>Virus Res</i> . 192:92. <a href="#">PubMed</a> 2. Hinks TSC, <i>et al.</i> 2019. <i>Cell Rep</i> . 28:3249. <a href="#">PubMed</a> 3. Zhu Y, <i>et al.</i> 2019. <i>Cell Stem Cell</i> . 25:542. <a href="#">PubMed</a> 4. Li YR, <i>et al.</i> 2021. <i>Cell Rep Med</i> . 2:100449. <a href="#">PubMed</a> 5. Osman A, <i>et al.</i> 2014. <i>J Immunol</i> . 192:5083. <a href="#">PubMed</a> 6. Al-ofi E, <i>et al.</i> 2012. <i>PLoS One</i> . 7:e42217. <a href="#">PubMed</a>
<b>RRID</b>	AB_345305 (BioLegend Cat. No. 313705)

## Antigen Details

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<b>Structure</b>	G-coupled receptor family 1, membrane protein, 45 kD
<b>Distribution</b>	Subset of T cells, monocytes
<b>Function</b>	Binds C-C chemokines and transduces an intracellular signal thought to result in proliferation and differentiation. Acts as a co-receptor with CD4 for HIV-1
<b>Ligand/Receptor</b>	MIP-1 $\alpha$ , MIP-1 $\beta$ , RANTES
<b>Cell Type</b>	Dendritic cells, Monocytes, 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. Samson M, <i>et al.</i> 1996. <i>Biochemistry</i> 35:3362.</li><li>2. Raport CJ, <i>et al.</i> 1996. <i>J. Biol. Chem.</i> 271:17161.</li><li>3. Combadiere C, <i>et al.</i> 1996. <i>J. Leukoc. Biol.</i> 60:147.</li><li>4. Deng H, <i>et al.</i> 1996. <i>Nature</i> 381:661.</li><li>5. Lai J, <i>et al.</i> 2003. <i>CVI.</i> 10:1123.</li><li>6. Mañes S, <i>et al.</i> 2003. <i>J. Exp. Med.</i> 198:1381.</li><li>7. Vaday GG, <i>et al.</i> 2006. <i>Prostate</i> 66:124.</li></ol>
<b>Gene ID</b>	<a href="#">1234</a>

## Related Protocols

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[Cell Surface Flow Cytometry Staining Protocol](#)

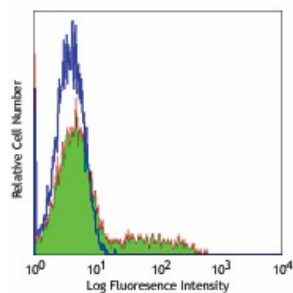
## Other Formats

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FITC anti-human CD195 (CCR5), PE anti-human CD195 (CCR5), Alexa Fluor® 647 anti-human CD195 (CCR5), Alexa Fluor® 700 anti-human CD195 (CCR5), PerCP/Cyanine5.5 anti-human CD195 (CCR5), Pacific Blue™ anti-human CD195 (CCR5), Purified anti-human CD195 (CCR5)

## Product Data

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Human peripheral blood lymphocytes were stained with CD195 (clone HEK/1/85a) FITC (filled histogram), or rat IgG2a,  $\kappa$  FITC (open histogram).

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