

PE anti-mouse CD195 (CCR5) Antibody

Catalog# / Size	107005 / 50 µg 107006 / 200 µg
Clone	HM-CCR5
Regulatory Status	RUO
Other Names	CCR5, C-C chemokine receptor type 5, HIV-1 fusion co-receptor
Isotype	Armenian Hamster IgG
Description	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-1α, and MIP-1β.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Armenian Hamster
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions.
Concentration	0.2 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is ≤1.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	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 _v -PE (Cat. No. 405204)).
Application References	<ol style="list-style-type: none"> 1. Mao A, <i>et al.</i> 2005. <i>J. Immunol.</i> 175:5146. (FC) PubMed 2. Ishida Y, <i>et al.</i> 2007. <i>Am J Pathol.</i> 170:843. (FC) PubMed 3. Zeiser Z, <i>et al.</i> 2008. <i>Blood</i> 111:453. (FC) PubMed 4. Sharma R, <i>et al.</i> 2009. <i>J. Immunol.</i> 183:3212 (FC) PubMed 5. Kohlmeier JE, <i>et al.</i> 2008. <i>Immunity.</i> 29:101. (FC) PubMed
(PubMed link indicates BioLegend citation)	
Product Citations	<ol style="list-style-type: none"> 1. Richardson M, <i>et al.</i> 2014. <i>PLoS Negl Trop Dis.</i> 8:2825. PubMed 2. Nacer A, <i>et al.</i> 2014. <i>PLoS Pathog.</i> 10:1004528. PubMed 3. Fend L, <i>et al.</i> 2014. <i>Cancer Immunol Res.</i> 2:1163. PubMed 4. Meunier I, <i>et al.</i> 2015. <i>PLoS One.</i> 10: 0138055. PubMed 5. Mencarelli A, <i>et al.</i> 2016. <i>Sci Rep.</i> 6:30802. PubMed 6. Diao N, <i>et al.</i> 2016. <i>Sci Rep.</i> 6:34672. PubMed 7. Geng S, <i>et al.</i> 2016. <i>Nat Commun.</i> 7:13436. PubMed

8. Zhuang Z, *et al.* 2021. *J Exp Med.* 218:00:00. [PubMed](#)
9. Chatterjee S *et al.* 2017. *Cell metabolism.* 27(1):85-100 . [PubMed](#)
10. Graham JB, *et al.* 2017. *Curr Protoc Mouse Biol.* 7:221. [PubMed](#)
11. He W *et al.* 2018. *Immunity.* 49(6):1175-1190 . [PubMed](#)
12. Mariani SA, *et al.* 2019. *Immunity.* 50:1439. [PubMed](#)
13. Gaylo-Moynihan A *et al.* 2019. *Immunity.* 51(2):298-309 . [PubMed](#)
14. Oliveira AC *et al.* 2017. *eLife.* 6 pii: e30883. [PubMed](#)

RRID AB_313300 (BioLegend Cat. No. 107005)
 AB_313301 (BioLegend Cat. No. 107006)

Antigen Details

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

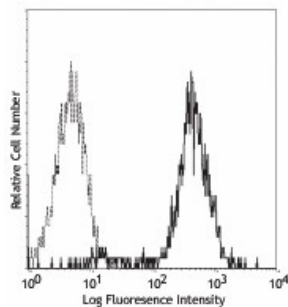
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

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)

Product Data



CCR5 transfected cell line NRK/CCR5 stained with HM-CCR5 PE

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