

Purified anti-human CD192 (CCR2) Antibody

Catalog# / Size	357201 / 25 µg 357202 / 100 µg
Clone	K036C2
Regulatory Status	RUO
Other Names	CKR2, CCR2A, CCR2B, CKR2A, CKR2B, CMKBR2, MCP-1-R, CC-CKR-2
Isotype	Mouse IgG2a, κ
Description	CCR2 is a chemokine receptor that binds monocyte chemoattractant proteins (MCP-1, 2, 3 and 4). Two spliced variants were initially described for CCR2 (CCR2A and CCR2B). These variants differ in their terminal carboxyl tails. Monocyte adhesion to the arterial endothelium and subsequent migration into the intima are central events in the pathogenesis of atherosclerosis. CCR2 and MCP-1 have been associated to atherosclerotic plaques. MCP-1 is induced by modified-LDL in endothelial cells and may trigger firm adhesion of monocytes to vascular endothelium under flow conditions. Local overexpression of MCP-1 at vessel walls induces infiltration of macrophages and formation of atherosclerotic lesions. Obesity induces an inflammatory state that is implicated in many clinically important complications, including insulin resistance, diabetes, atherosclerosis, and non-alcoholic fatty liver disease. CCR2 influences the development of obesity and associated adipose tissue inflammation.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	CCR2 DNA immunogen
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
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.
Application Notes	Epitope of clone K036C2 has been mapped to amino acids 11-29 and 21-39 of human CCR2.
Application References	1. Tanaka T, <i>et al.</i> 2022. <i>Monoclon Antib Immunodiagn Immunother.</i> 41(5):285-289 (Epitope)
(PubMed link indicates BioLegend citation)	
Product Citations	<ol style="list-style-type: none"> 1. Friebel E, <i>et al.</i> 2020. <i>Cell.</i> 181(7):1626-1642.e20. PubMed 2. Wagner J <i>et al.</i> 2019. <i>Cell.</i> 177(5):1330-1345. PubMed 3. Song S, <i>et al.</i> 2021. <i>Commun Biol.</i> 4:1338. PubMed 4. Zhao BN, <i>et al.</i> 2019. <i>J Immunol.</i> 203:3157. PubMed 5. Roussel M, <i>et al.</i> 2021. <i>Cell Reports Medicine.</i> 2(6):100291. PubMed 6. Chevrier S, <i>et al.</i> 2021. <i>Cell Reports Medicine.</i> 2(1):100166. PubMed 7. Chevrier S, <i>et al.</i> 2018. <i>Cell Syst.</i> 0.675. PubMed
RRID	AB_2561850 (BioLegend Cat. No. 357201) AB_2561851 (BioLegend Cat. No. 357202)

Antigen Details

Structure	Chemokine receptor, GPCR, seven transmembrane receptor
Distribution	Monocytes, macrophages, immature dendritic cells, memory T cells
Function	Induces monocyte adhesion to endothelial cells and chemotaxis
Ligand/Receptor	CCL2 (MCP-1), CCL7 (MCP-3), CCL8 (MCP-2), CCL13 (MCP-4), CCL16 (HCC4)
Cell Type	Dendritic cells, Macrophages, Monocytes, T cells
Biology Area	Cell Adhesion, Cell Biology, Immunology, Innate Immunity, Neuroinflammation, Neuroscience
Molecular Family	CD Molecules, Cytokine/Chemokine Receptors, GPCR
Antigen References	<ol style="list-style-type: none">1. Wong LM, <i>et al.</i> 1997. <i>J. Biol. Chem.</i> 272:1038.2. Papadopoulou C, <i>et al.</i> 2008. <i>Cytokine</i> 43:181.3. Barlic J, <i>et al.</i> 2007. <i>J. Leukoc. Biol.</i> 82:226.4. Gu L, <i>et al.</i> 1998. <i>Mol. Cell</i> 2:275.5. Volpe S, <i>et al.</i> 2012. <i>PLoS One.</i> 7:e37208.
Gene ID	729230

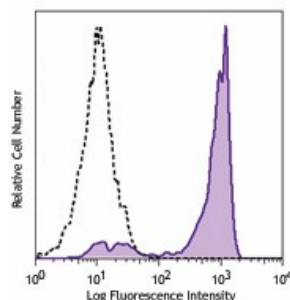
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human CD192 (CCR2), PerCP/Cyanine5.5 anti-human CD192 (CCR2), PE anti-human CD192 (CCR2), APC anti-human CD192 (CCR2), Brilliant Violet 421™ anti-human CD192 (CCR2), PE/Cyanine7 anti-human CD192 (CCR2), Brilliant Violet 605™ anti-human CD192 (CCR2), Brilliant Violet 510™ anti-human CD192 (CCR2), APC/Cyanine7 anti-human CD192 (CCR2), PE/Dazzle™ 594 anti-human CD192 (CCR2), Biotin anti-human CD192 (CCR2), Alexa Fluor® 488 anti-human CD192 (CCR2), APC/Fire™ 750 anti-human CD192 (CCR2), TotalSeq™-A0242 anti-human CD192 (CCR2), Brilliant Violet 711™ anti-human CD192 (CCR2), Brilliant Violet 785™ anti-human CD192 (CCR2), TotalSeq™-B0242 anti-human CD192 (CCR2) Antibody, TotalSeq™-C0242 anti-human CD192 (CCR2)

Product Data



Human peripheral blood monocytes were stained with purified CCR2 (clone K036C2) (filled histogram) or purified mouse IgG2a, κ isotype control (open histogram), followed by anti-mouse IgG FITC.

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