

Spark PLUS B550™ anti-human CD192 (CCR2) Antibody

Catalog# / Size	357239 / 25 tests
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 and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with Spark PLUS B550™ under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool.)
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 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. * Spark PLUS B550™ has a maximum excitation of 516 nm and a maximum emission of 540 nm.
Excitation Laser	Blue Laser (488 nm)
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)	

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	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

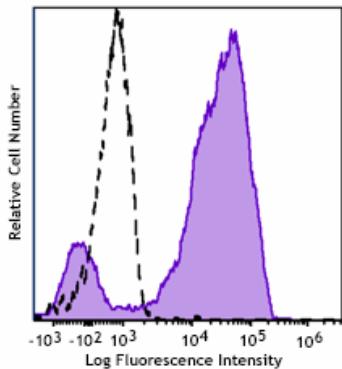
Related Protocols

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

Other Formats

TotalSeq™-B0242 anti-human CD192 (CCR2) Antibody, TotalSeq™-C0242 anti-human CD192 (CCR2), Alexa Fluor® 488 anti-human CD192 (CCR2), Purified anti-human CD192 (CCR2), Brilliant Violet 421™ anti-human CD192 (CCR2), Brilliant Violet 605™ anti-human CD192 (CCR2), Spark PLUS B550™ 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), APC/Fire™ 750 anti-human CD192 (CCR2), TotalSeq™-A0242 anti-human CD192 (CCR2), Brilliant Violet 711™ anti-human CD192 (CCR2), PerCP/Cyanine5.5 anti-human CD192 (CCR2), APC anti-human CD192 (CCR2), Brilliant Violet 785™ anti-human CD192 (CCR2), PE anti-human CD192 (CCR2), PE/Cyanine7 anti-human CD192 (CCR2)

Product Data



Human peripheral blood cells were stained with anti-human CD192 (CCR2) (clone K036C2) Spark PLUS B550™ (filled histogram). Open histogram represents unstained cells. Data shown are gated on the monocyte population.

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8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587