

PE/Cyanine7 anti-human CD206 (MMR) Antibody

Catalog# / Size	321123 / 25 tests 321124 / 100 tests
Clone	15-2
Regulatory Status	RUO
Other Names	MMR (macrophage mannose receptor), MR (mannose receptor), CD206, MRC1
Isotype	Mouse IgG1, κ
Description	Macrophage mannose receptor (MMR) is a 162-175 kD type I membrane protein also known as CD206, MRC1, or mannose receptor (MR). It is a pattern recognition receptor (PRR) that belongs to C-type lectin superfamily. MMR is expressed on macrophages, dendritic cells, and hepatic or lymphatic endothelial cells, but not on monocytes. MMR recognizes a range of microbial carbohydrates bearing mannose, fucose, or N-acetyl glucosamine. MMR mediates endocytosis and phagocytosis, induces activation of macrophages and antigen presentation, plays an important role in host defense, and provides a link between innate and adaptive immunity.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Purified human mannose receptor
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 PE/Cyanine7 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
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 μ l per million cells in 100 μ l staining volume or 5 μ l per 100 μ l of whole blood.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	The 15-2 antibody blocks the interaction of MMR with its ligand, and inhibits mannose receptor-mediated degradation of t-PA by macrophages. Additional reported applications of this antibody (for the relevant formats) include: Western blotting ¹ , blocking of ligand binding ^{1,2} , immunofluorescence ³ , and immunohistochemical staining of acetone-fixed frozen tissue sections ¹ . The Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/ μ g, Azide-Free, 0.2 μ m filtered) is recommended for functional assays (Cat. No. 321149 and 321150).
Additional Product Notes	BioLegend is in the process of converting the name PE/Cy7 to PE/Cyanine7. The dye molecule remains the same, so you should expect the same quality and performance from our PE/Cyanine7 products. Please contact Technical Service if you have any questions.
Application References	<ol style="list-style-type: none"> Noorman F, <i>et al.</i> 1997. <i>J. Leukocyte Biol.</i> 61:63. (WB, IHC, Block) Barrett-Bergshoeff M, <i>et al.</i> 1997. <i>Thromb Haemost.</i> 77:718. (Block) Kato M, <i>et al.</i> 2007. <i>J. Immunol.</i> 179:6052. (IF)

Product Citations	<ol style="list-style-type: none"> 1. Billing F, <i>et al.</i> 2021. ACS Appl Mater Interfaces. 13:55534. PubMed 2. Bryson BD, <i>et al.</i> 2019. Nat Commun. 10:2329. PubMed 3. Mikhailkevich N, <i>et al.</i> 2021. PLoS Pathog. 17:e1009305. PubMed 4. Wu Y, <i>et al.</i> 2022. J Cancer Res Clin Oncol. . PubMed 5. Yamaguchi Y, <i>et al.</i> 2022. J Immunother Cancer. 10:. PubMed 6. Lewis D, <i>et al.</i> 2016. Cardiovasc Res. 109: 283 - 293. PubMed 7. Becker J, <i>et al.</i> 2018. Virulence. 9:1669. PubMed
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RRID	AB_10900995 (BioLegend Cat. No. 321123) AB_10933248 (BioLegend Cat. No. 321124)
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Antigen Details

Structure	Type I membrane protein, Pattern Recognition Receptor (PRR) family, C-type lectin superfamily, 162-175 kD
Distribution	Macrophages, dendritic cells, hepatic and lymphatic endothelial cells
Function	Pathogen binding, facilitate phagocytosis and endocytosis, macrophage activation and antigen presentation
Ligand/Receptor	Mannose, fucose, N-acetyl glucosamine
Cell Type	Dendritic cells, Endothelial cells, Macrophages
Biology Area	Cell Biology, Immunology, Neuroscience, Neuroscience Cell Markers
Molecular Family	CD Molecules
Antigen References	<ol style="list-style-type: none"> 1. Mason D, <i>et al.</i> Eds. 2002. Leukocyte Typing VII. Oxford University Press. p303 2. Wileman TE, <i>et al.</i> 1986. <i>P. Natl. Acad. Sci. USA</i> 83:2501. 3. Apostolopoulos V and McKenzie IF. 2001. <i>Curr. Mol. Med.</i> 1:469. 4. Le Cabec V, <i>et al.</i> 2005. <i>J. Leukocyte Biol.</i> 77:934. 5. Barrett-Bergshoeff M, <i>et al.</i> 1997. <i>Thromb. Haemostasis</i> 77:718.
Gene ID	4360

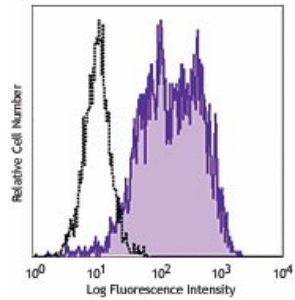
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human CD206 (MMR), FITC anti-human CD206 (MMR), PE anti-human CD206 (MMR), PE/Cyanine5 anti-human CD206 (MMR), APC anti-human CD206 (MMR), Alexa Fluor® 488 anti-human CD206 (MMR), Alexa Fluor® 647 anti-human CD206 (MMR), Biotin anti-human CD206 (MMR), APC/Cyanine7 anti-human CD206 (MMR), PerCP/Cyanine5.5 anti-human CD206 (MMR), PE/Cyanine7 anti-human CD206 (MMR), Brilliant Violet 421™ anti-human CD206 (MMR), Purified anti-human CD206 (MMR) (Maxpar® Ready), Alexa Fluor® 700 anti-human CD206 (MMR), PE/Dazzle™ 594 anti-human CD206 (MMR), APC/Fire™ 750 anti-human CD206 (MMR), Brilliant Violet 711™ anti-human CD206 (MMR), Brilliant Violet 510™ anti-human CD206 (MMR), Brilliant Violet 605™ anti-human CD206 (MMR), Brilliant Violet 785™ anti-human CD206 (MMR), TotalSeq™-A0205 anti-human CD206 (MMR), TotalSeq™-B0205 anti-human CD206 (MMR), TotalSeq™-C0205 anti-human CD206 (MMR), Ultra-LEAF™ Purified anti-human CD206 (MMR), Pacific Blue™ anti-human CD206 (MMR), PE/Fire™ 700 anti-human CD206 (MMR), TotalSeq™-D0205 anti-human CD206 (MMR)

Product Data



GM-CSF-stimulated (3 days) human peripheral blood monocytes were stained with CD206 (clone 15-2) PE/Cyanine7 (filled histogram) or mouse IgG1, κ PE/Cyanine7 isotype control (open histogram).

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