

PE/Cyanine7 anti-human MCP-1 Antibody

Catalog# / Size	502613 / 25 tests 502614 / 100 tests
Clone	5D3-F7
Regulatory Status	RUO
Other Names	Monocyte chemoattractant protein-1, Monocyte chemoattractant and activating factor (MCAF), JE, Small inducible cytokine A2 (SCYA2), HC-11, P6, Smooth muscle cell chemotactic factor (SMC-CF), CCL2
Isotype	Mouse IgG1, κ
Description	Monocyte chemotactic protein-1 (MCP-1) also known as monocyte chemotactic and activating factor (MCAF) was identified based on its ability to chemoattract monocytes. Subsequently, MCP-1 has also been found to regulate adhesion molecule expression and cytokine production in monocytes. MCP-1 is identical to the product of the JE gene, a PDGF inducible gene. MCP-1 is a member of the beta (C-C) chemokine subfamily, known as CCL2. The 5D3-F7 antibody reacts with human monocyte chemoattractant protein-1 (MCP-1).

Product Details

Verified Reactivity	Human
Reported Reactivity	Cynomolgus, Rhesus
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Recombinant human MCP-1
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	ICFC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by intracellular 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.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	ELISA or ELISPOT Detection¹: The biotinylated 5D3-F7 antibody is useful as the detection antibody in a sandwich ELISA or ELISPOT assay, when used in conjunction with the purified 2H5 antibody (Cat. No. 505902/505906) as the capture antibody. ELISA or ELISPOT Capture: The purified 5D3-F7 antibody is useful as the capture antibody in a sandwich ELISA or ELISPOT assay, when used in conjunction with the biotinylated 2H5 antibody (Cat. No. 505908) as the detection antibody. The LEAF™ purified antibody (Cat. No. 502607) is suggested for ELISPOT capture. Additional reported applications (for the relevant formats) include: intracellular flow cytometry ² , immunoprecipitation ^{1,3} , Western blotting ¹ , and immunohistochemical staining ¹ .
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

1. Peri, G., *et al.* 1994. *J. Immunol. Meth.* 174:249. (IP, IHC, WB)
2. Rezaie-Majd, A., *et al.* 2002. *Arterioscler Thromb Vasc Biol.* 22:1194. (ICFC)
3. Hirsch, A., *et al.* 1999. *J. Virol.* 73:404. (IP)

RRID

AB_2734490 (BioLegend Cat. No. 502613)
AB_2734491 (BioLegend Cat. No. 502614)

Antigen Details

Structure	CC chemokine; dimer; 13.8 kD (Mammalian)
Bioactivity	Chemoattractant; regulate adhesion molecule expression, cytokine production in monocytes; proliferation/activation of CC-chemokine activated killer cells
Cell Sources	Monocytes, vascular endothelial cells, smooth muscle, glomerular mesangial cells
Cell Targets	Monocytes, basophils, T cells, NK cells, immature dendritic cells
Receptors	CCR2; CCR5; CCR10; D6; possibly L-CCR
Cell Type	Embryonic Stem Cells
Biology Area	Cell Biology, Immunology, Neuroinflammation, Neuroscience, Stem Cells
Molecular Family	Cytokines/Chemokines
Antigen References	<ol style="list-style-type: none">1. Fitzgerald K, <i>et al.</i> Eds. 2001. <i>The Cytokine FactsBook.</i> Academic Press, San Diego.2. Bischoff S, <i>et al.</i> 1992. <i>J. Exp. Med.</i> 175:1271.3. Charo I, <i>et al.</i> 1994. <i>P. Natl. Acad. Sci. USA</i> 91:2752.4. Jiang Y, <i>et al.</i> 1992. <i>J. Immunol.</i> 148:2423.
Regulation	Upregulated by IL-1, TNF- α , PDGF, TGF- β
Gene ID	6347

Related Protocols

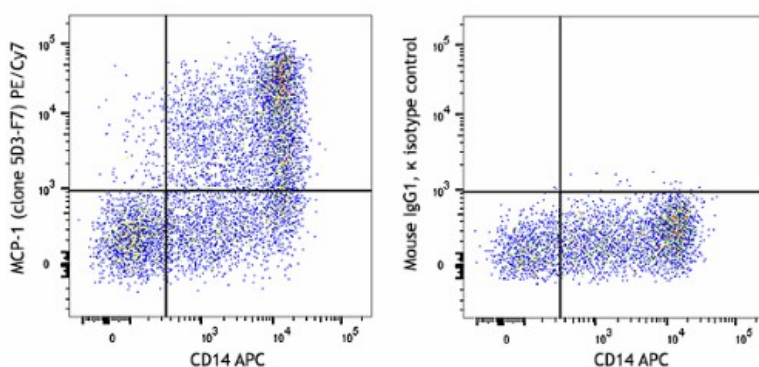
[Intracellular Cytokine Staining Protocol - Video](#)

[Intracellular Flow Cytometry Staining Protocol](#)

Other Formats

PE anti-human MCP-1, Purified anti-human MCP-1, Biotin anti-human MCP-1, APC anti-human MCP-1, PE/Cyanine7 anti-human MCP-1

Product Data



IFN- γ primed human peripheral blood monocytes were stimulated with LPS overnight (in the presence of monensin), then surface stained with CD14 APC and intracellularly stained with MCP-1 PE/Cyanine7 (left) or mouse IgG1, κ PE/Cyanine7 isotype control (right).

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