

## PE anti-human MCP-1 Antibody

<b>Catalog# / Size</b>	502604 / 100 tests
<b>Clone</b>	5D3-F7
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	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
<b>Isotype</b>	Mouse IgG1, $\kappa$
<b>Description</b>	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

<b>Verified Reactivity</b>	Human
<b>Reported Reactivity</b>	Cynomolgus, Rhesus
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Recombinant human MCP-1
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions.
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">ICFC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">intracellular immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is 5 $\mu$ l per million cells in 100 $\mu$ l staining volume or 5 $\mu$ l per 100 $\mu$ l of whole blood.
<b>Excitation Laser</b>	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
<b>Application Notes</b>	<b>ELISA or ELISPOT Detection<sup>1</sup>:</b> 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. <b>ELISA or ELISPOT Capture:</b> 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. <b>Additional reported applications (for the relevant formats) include:</b> intracellular flow cytometry <sup>2</sup> , immunoprecipitation <sup>1,3</sup> , Western blotting <sup>1</sup> , and immunohistochemical staining <sup>1</sup> .
<b>Application References</b>	1. Peri, G., <i>et al.</i> 1994. <i>J. Immunol. Meth.</i> 174:249. (IP, IHC, WB) 2. Rezaie-Majd, A., <i>et al.</i> 2002. <i>Arterioscler Thromb Vasc Biol.</i> 22:1194. (ICFC) 3. Hirsch, A., <i>et al.</i> 1999. <i>J. Virol.</i> 73:404. (IP)
<b>(PubMed link indicates BioLegend citation)</b>	
<b>Product Citations</b>	1. Wolf D, <i>et al.</i> 2018. <i>Nat Commun.</i> 9:525. <a href="#">PubMed</a> 2. Rizzo MD, <i>et al.</i> 2019. <i>J Neuroimmunol.</i> 333:576969. <a href="#">PubMed</a>

RRID AB\_315243 (BioLegend Cat. No. 502604)

## Antigen Details

<b>Structure</b>	CC chemokine; dimer; 13.8 kD (Mammalian)
<b>Bioactivity</b>	Chemoattractant; regulate adhesion molecule expression, cytokine production in monocytes; proliferation/activation of CC-chemokine activated killer cells
<b>Cell Sources</b>	Monocytes, vascular endothelial cells, smooth muscle, glomerular mesangial cells
<b>Cell Targets</b>	Monocytes, basophils, T cells, NK cells, immature dendritic cells
<b>Receptors</b>	CCR2; CCR5; CCR10; D6; possibly L-CCR
<b>Cell Type</b>	Embryonic Stem Cells
<b>Biology Area</b>	Cell Biology, Immunology, Neuroinflammation, Neuroscience, Stem Cells
<b>Molecular Family</b>	Cytokines/Chemokines
<b>Antigen References</b>	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.
<b>Regulation</b>	Upregulated by IL-1, TNF- $\alpha$ , PDGF, TGF- $\beta$
<b>Gene ID</b>	<a href="#">6347</a>

## Related Protocols

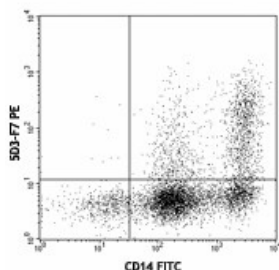
[Intracellular Cytokine Staining Protocol - Video](#)

[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- $\gamma$  primed human peripheral blood monocytes were stimulated with LPS overnight (in the presence of monensin), then surface stained with CD14 APC and intracellular stained with 5D3-F7 PE.

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Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587