

Purified anti-human MCP-1 Antibody

Catalog# / Size	502601 / 50 µg 502602 / 500 µg
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.
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	ELISA Capture - Quality tested WB - Verified ELISA & ELISPOT Detection, ICFC, IHC, IP - Reported in the literature, not verified in house
Recommended Usage	Recommended Usage: Each lot of this antibody is quality control tested by ELISA assay . For ELISA capture applications, a concentration range of 2-8 µg/ml is recommended. To obtain a linear standard curve, serial dilutions of MCP-1 recombinant protein ranging from 2000 to 31.3 pg/ml are recommended for each ELISA plate. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	ELISA or ELISPOT Detection ¹ : 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 .
Application References	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)
(PubMed link indicates BioLegend citation)	
RRID	AB_315240 (BioLegend Cat. No. 502601)

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. The Cytokine FactsBook. 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

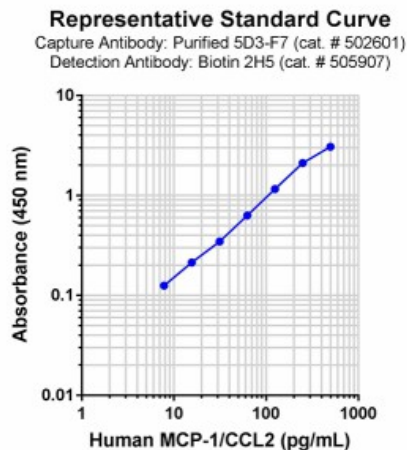
[Active Protocols: Sandwich ELISA - Video](#)

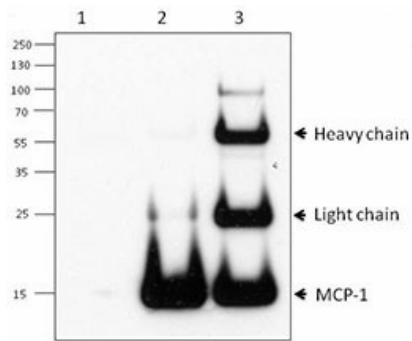
[Sandwich ELISA Protocol](#)

Other Formats

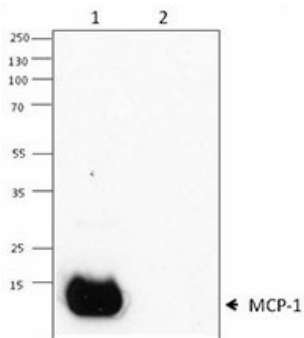
PE anti-human MCP-1, Purified anti-human MCP-1, Biotin anti-human MCP-1, APC anti-human MCP-1, PE/Cyanine7 anti-human MCP-1

Product Data





Immunoprecipitation/Western blot analysis of capturing ability of MCP-1 antibody for 200ng/ml MCP-1 recombinant protein. Lane 1 was immunoprecipitated with Armenian hamster IgG isotype control antibody and lane 2 was immunoprecipitated with MCP-1 antibody (2H5) and lane 3 was immunoprecipitated with MCP-1(5D3-F7). Western blot analysis was performed using mouse anti-MCP-1 antibody (5D3-F7).



Western blot analysis of recombinant human MCP-1 (lane 1), and recombinant mouse MCP-1 (lane 2) using anti-MCP-1 antibody (5D7-F7).

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