

Biotin anti-human MCP-1 Antibody

| | |
|--------------------------|---|
| Catalog# / Size | 502608 / 50 µg 502609 / 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, and conjugated with biotin under optimal conditions. |
| Concentration | 0.5 mg/ml |
| Storage & Handling | The antibody solution should be stored undiluted between 2°C and 8°C. Do not freeze. |
| Application | ELISA Detection , ELISPOT Detection , ICFC |
| Recommended Usage | Each lot of this antibody is quality control tested by ELISA assay . For use as an ELISA detection antibody, a concentration range of 0.5-2 µg/ml is recommended. To obtain a linear standard curve, serial dilutions of MCP-1 recombinant protein ranging from 2000 to 15 pg/ml are recommended for each ELISA plate. For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 µg per 10 ⁶ cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application. |
| Application Notes | <p>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.</p> <p>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.</p> <p>Additional reported applications (for the relevant formats) include: intracellular flow cytometry², immunoprecipitation^{1,3}, Western blotting¹, and immunohistochemical staining¹.</p> |
| Application References | <ol style="list-style-type: none"> 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_315247 (BioLegend Cat. No. 502608) |

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

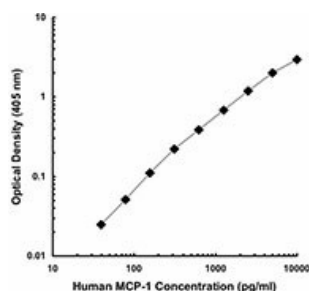
Active Protocols: [Sandwich ELISA - Video](#)

[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



For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

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