

# Product Data Sheet

## Biotin anti-mouse/rat/human MCP-1

**Catalog # / Size:** 505907 / 50 µg  
505908 / 500 µg

**Clone:** 2H5

**Isotype:** Armenian Hamster IgG

**Immunogen:** CHO-expressed, recombinant mouse MCP-1

**Reactivity:** Mouse, Rat, Human, **Cross-Reactivity:** Rhesus

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.5 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C. **Do not freeze.**

## Applications:

**Applications:** ELISA Detection, ELISPOT Detection

**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 1-4 µg/ml is recommended. To obtain a linear standard curve, serial dilutions of MCP-1 recombinant protein ranging from 1000 to 8 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 Capture<sup>1</sup>:** The purified 2H5 antibody is useful as the capture antibody in a sandwich ELISA or ELISPOT assay, when used in conjunction with the biotinylated 4E2/MCP antibody (Cat. No. 506002) as the detecting antibody for the detection of mouse MCP-1. The purified 2H5 antibody is useful as the capture antibody in a sandwich ELISA or ELISPOT assay, when used in conjunction with the biotinylated 5D3-F7 antibody (Cat. No. 502609) as the detecting antibody for the detection of human MCP-1. The LEAF™ purified antibody is suggested for ELISPOT capture.

**Flow Cytometry<sup>2</sup>:** The fluorochrome-labeled 2H5 antibody is useful for intracellular immunofluorescent staining and flow cytometric analysis to identify MCP-1 -producing cells within mixed cell populations. For intracellular cytokine staining protocol, please visit [www.biolegend.com](http://www.biolegend.com) and click on the support section.

**Neutralization<sup>1,4,6</sup>:** The LEAF™ purified antibody (Endotoxin in vivo and *in vitro* (Cat. No. 505906).

**Additional reported applications (for the relevant formats) include:** Western blotting<sup>3</sup>, immunohistochemistry<sup>5</sup> of paraformaldehyde-fixed, saponin-treated frozen tissue sections.

**Application References:**

1. Luo, Y., *et al.* 1994. *J. Immunol.* 153:3708.
2. Zhang, Y., *et al.* 2002. *J. Immunol.* 168:3088.
3. Luo, Y., *et al.* 1999 *J. Immunol.* 163:3985.
4. Morrison, B. E., *et al.* 2003 *J. Clin. Invest.* 112:1862.
5. Hancock, W. W., *et al.* 1997 *Transplantation* 64:696.
6. Yu, R., *et al.* 2006 *Obesity* 14:1353.

**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 2H5 antibody reacts with mouse, rat, and human MCP-1. The 2H5 antibody can neutralize the bioactivity of natural or recombinant MCP-1.

**Antigen References:**

1. Fitzgerald, K., *et al.* Eds. 2001. *The Cytokine FactsBook*. Academic Press, San Diego.
2. Bischoff, S., *et al.* 1992. *J. Exp. Med.* 175:1271.
3. Charo, I., *et al.* 1994. *P. Natl. Acad. Sci. USA* 91:2752.
4. Jiang, Y., *et al.* 1992. *J. Immunol.* 148:2423.

Related Products:	Product	Clone	Application
	Purified anti-human MCP-1	5D3-F7	ELISA Capture, ELISPOT Capture, ICFC, IHC, IP, WB
	HRP Streptavidin		ELISA, ELISPOT, IHC, WB
	TMB Substrate Reagent Set		ELISA
	ELISA Assay Diluent (5X)		ELISA
	Purified anti-mouse MCP-1	4E2/MCP	ELISA Capture, WB
	LEAF™ Purified anti-mouse MCP-1	4E2/MCP	ELISA Capture, ELISPOT Capture



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