# Product Information Sheet





# Polyclonal Anti- Monocyte chemoattractant protein-1, MCP-1

Catalogue No. PA1356

Lot No. 01310120856124

Ig type rabbit IgG

Size 100µg/vial

#### Specificity

Human, rat, mouse No cross reactivity with other proteins.

#### **Recommended application**

Western blot



### Immunogen

A synthetic peptide corresponding to a sequence at the N-terminal of human MCP-1 (24-36 aa), different from the mouse sequence by two amino acids.

#### Purity

Immunogen affinity purified.

## Application

	Concen- tration	Tested Species	Concluded Species	Antigen Retrieval
WB	1ug/ml	Hu, Rat, Ms	-	-
IHC-P	-	-	-	-
IHC-F	-	-	-	-
ICC	-	-	-	-

WB: The detection limit for MCP-1 is approximately 10ng/lane under non-reducing and reducing conditions.

Other applications have not been tested.

Optimal dilutions should be determined by end user.

#### Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na $_2$ HPO $_4$ , 0.05mg Thimerosal, 0.05mg NaN $_3$ .

To reorder contact us at:

# Reconstitution

Antagene, Inc. 0.2ml of distilled water will yield a concentration of 500µg/ml.

# Toll Free: 1(866)964-2589 Storage

email: Info@antageneinc.com

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for longer time.

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC AND CLINICAL USE.

### BACKGROUND

Monocyte chemoattractant protein-1 (MCP-1), a member of the chemokine (chemotactic cytokine) family, is a potent monocyte agonist that is upregulated by oxidized lipids.<sup>1</sup> MCP-1 is also known as CCL2, SCYA2, MCAF. MCAF is a member of family of factors involved in immune and inflammatory responses. The amino acid sequence deduced from the nucleotide sequence reveals the primary structure of the MCAF precursor to be composed of a putative signal peptide sequence of 23 amino acid residues and a mature MCAF sequence of 76 amino acid residues.<sup>2</sup> MCP-1 plays a unique and crucial role in the initiation of atherosclerosis and may provide a new therapeutic target in this disorder.<sup>3</sup> Human MCP-1 is a 8.7KDa non-glycoprotein, consisting of 99 amino acids in precursor form and 76 amino acids in mature form.

## REFERENCE

- Gosling, J.; Slaymaker, S.; Gu, L.; Tseng, S.; Zlot, C. H.; Young, S. G.; Rollins, B. J.; Charo, I. F. MCP-1 deficiency reduces susceptibility to atherosclerosis in mice that overexpress human apolipoprotein B. *J. Clin. Invest.* 103: 773-778, 1999.
- 2. Furutani, Y.; Nomura, H.; Notake, M.; Oyamada, Y.; Fukui, T.; Yamada, M.; Larsen, C. G.; Oppenheim, J. J.; Matsushima, K. Cloning and sequencing of the cDNA for human monocyte chemotactic and activating factor (MCAF). *Biochem. Biophys.*
- 3. Gu, L.; Okaka, Y.; Clinton, S. K.; Gerard, C.; Sukhova, G. K.; Libby, P.; Rollins, B. J. Absence of monocyte chemoattractant protein-1 reduces atherosclerosis in low density lipoprotein receptor-deficient mice.