



Product Information Sheet

Polyclonal Anti- Monocyte chemoattractant protein-1, MCP-1 (Magnetic Bead Conjugate)

Catalogue No. PA1356-M

Lot No. 01310120856124

Ig type rabbit IgG

Size 100µg/vial

Specificity

Human, rat, mouse

No cross reactivity with other proteins.

Recommended application

ImmunoPrecipitation (IP)

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.

Contents

Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg NaN₃.

Storage

Store at 4°C for frequent use.

Description

This Antagene antibody is immobilized by the covalent reaction of hydrazinonicotinamide-modified antibody with formylbenzamide-modified magnetic beads. It is useful for immunoprecipitation.

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.¹ 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.² MCP-1 plays a unique and crucial role in the initiation of atherosclerosis and may provide a new therapeutic target in this disorder.³ 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

1. 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.