Revision 1

#2027 Store at -20C

MCP-1 Antibody

Cell Signaling TECHNOLOGY®

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H	Endogenous	13-15	Rabbit	#P13500	6347

Product Usage Information

Application	Dilution
Western Blotting	1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

Specificity / Sensitivity

MCP-1 Antibody detects endogenous levels of total human MCP-1 protein.

Species predicted to react based on 100% sequence homology:

Monkey

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Cys35 of human MCP-1. Antibodies were purified by protein A and peptide affinity chromatography.

Background

Monocyte chemotactic protein-1 (MCP-1), also known as CCL2, monocyte chemotactic activating factor (MCAF) or glioma-derived chemotactic factor-2 (GDCF-2), is the product of the human *JE* gene and a member of the family of C-C (or β) chemokines (1-4). The predicted molecular weight of MCP-1 protein is 11-13 kDa, but it may migrate at 20-30 kDa due to glycosylation. MCP-1 is secreted by a variety of cell types in response to pro-inflammatory stimuli and was originally described for its chemotactic activity on monocytes. This activity has led to studies demonstrating its role in diseases characterized by monocyte infiltrates such as psoriasis (5), rheumatoid arthritis (6) and atherosclerosis (7). MCP-1 may also contribute to tumor progression and angiogenesis (8). Signaling by MCP-1 is mediated by the G-protein coupled receptor CCR2 (9).

Background References

1. Matsushima, K. et al. (1989) *J Exp Med* 169, 1485-90.
2. Furutani, Y. et al. (1989) *Biochem Biophys Res Commun* 159, 249-55.
3. Robinson, E.A. et al. (1989) *Proc Natl Acad Sci USA* 86, 1850-4.
4. Rollins, B.J. et al. (1988) *Proc Natl Acad Sci USA* 85, 3738-42.
5. Gillitzer, R. et al. (1993) *J Invest Dermatol* 101, 127-31.
6. Koch, A.E. et al. (1992) *J Clin Invest* 90, 772-9.
7. Ylä-Herttuala, S. et al. (1991) *Proc Natl Acad Sci USA* 88, 5252-6.
8. Salcedo, R. et al. (2000) *Blood* 96, 34-40.
9. Charo, I.F. et al. (1994) *Proc Natl Acad Sci USA* 91, 2752-6.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse **GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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