

10-3527: Monoclonal Antibody to mouse MCP-1, ECE-2(Discontinued)

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| Clonality : | Monoclonal |
| Clone Name : | ECE.2 |
| Application : | IHC-Fr |
| Reactivity : | Mouse |
| Gene : | Ccl2 |
| Gene ID : | 20296 |
| Uniprot ID : | P10148 |
| Alternative Name : | Je, Mcp1, Scya2, Monocyte chemoattractant protein 1, Monocyte chemotactic and activating factor, Monocyte secretory protein JE, Small-inducible cytokine A2 |
| Isotype : | Rat IgG1 |
| Immunogen Information : | Synthetic peptide corresponding to residues 102-130 of mouse MCP-1 |

Description

The monoclonal antibody ECE.2 recognizes mouse monocyte chemoattractant protein 1 (MCP-1). The murine JE gene encodes the monocyte-specific cytokine monocyte chemotactic protein 1 (MCP- 1). MCP-1 is a CC chemokine of 76 amino acids (~11 kDa) and is chemotactic for monocytes and basophils but not neutrophils and eosinophils. MCP-1 is expressed by smooth muscle cells (SMC), macrophages, endothelial cells, keratinocytes and fibroblasts in response to inflammatory stimuli such as interleukin 1 beta and tumor necrosis factor alpha. MCP-1 has been implicated in a variety of inflammatory processes, including inflammatory bowel disease, rheumatoid arthritis, asthma, nephritis, and parasitic and viral infections. MCP-1 antigen is not detected in the endothelium or SMC of normal arteries. MCP-1 has also been shown to exhibit biological activities other than chemotaxis. It can induce the proliferation and activation of killer cells known as CHAK (CC-Chemokine-activated killer) MCP-1 signals via the CCR2 receptor, and is critical for aneurysm formation because of its stability to recruit leukocytes. These leukocytes produce extracellular matrix-degrading MMPs, thereby inductin aortic remodelling and dilatation. Interleukin-6 is also involved in this amplification loop accelerating vascular inflammation. MCP-/- mice display significantly delayed wound re-epithelialization, and also delayed wound angiogenesis.

Product Info

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| Amount : | 2(Discontinued) / 500 µg |
| Content : | 0.5 mg, 0.2 µm filtered protein G purified antibody solution in PBS, containing 0.1% bovine serum albumin and 0.02% sodium azide. |
| Storage condition : | Product should be stored at 4 °C. Under recommended storage conditions, product is stable for one year. |

Application Note

IHC-F: Sections (6 µm) were fixed with 4% PFA, blocked using 0.1% Triton-X and 5% serum for 15min at 37°C or o/n 4 °C and then incubated with 2 µg/ml antibody for 2h at 37°C. W: Samples electrophoresed on 15% SDS-PAGE were blotted on nitrocellulose and blocked with PBS/5% low fat dry milk. The blot was incubated with antibody (0.8 µg/ml) for 20 min at RT. Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.