



Overview

Synonyme	MCP-1 MCAE IE Monocyte Chemotactic Protein-1 (MCP-1) CCL2
Synonyms	MCP-1, MCAF, JE, Monocyte Chemotactic Protein-1 (MCP-1), CCL2 Chemokine (C-C motif) ligand 2 (CCL2) is also referred to as monocyte chemotactic protein 1 (MCP1) and small inducible cytokine A2. CCL2 is a small cytokine that belongs to the CC chemokine family. CCL2 recruits monocytes, memory T cells, and dendritic cells to the sites of inflammation produced by either tissue injury or infection. CCL2 is implicated in the pathogeneses of several diseases characterized by monocytic infiltrates, such as psoriasis, rheumatoid arthritis and atherosclerosis. CCL2 is anchored in the plasma membrane of endothelial cells by glycosaminoglycan side chains of proteoglycans. CCL2 is primarily secreted by monocytes, macrophages and dendritic cells. CCL2 can signal through the CCR2 receptor. Recombinant rat MCP-1/CCL2 produced in HEK293 cells is a polypeptide chain containing 125 amino acids. A fully biologically active molecule, rrMCP-1/CCL2 has a molecular mass of 10-15 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques.
Accession No	P14844
Species	Rat
Source	HEK 293
Biological Activity	The EC ₅₀ value of rat MCP-1/CCL2 on Ca ²⁺ mobilization assay in CHO-K1/G α 15/rCCR2 cells (human G α 15 and rat CCR2 stably expressed in CHO-K1 cells) is less than 0.3 μ g/ml.
Sequence	QPDAVNAPLT CCYSFTGKMI PMSRLENYKR ITSSRCPKEA VVFVTKLKRE ICADPNKEWV QKYIRKLDQN QVRSETTVFY KIASTLRTSA PLNVNLTHKS EANASTLFST TTSSTSVEVT SMTEN

Properties

Measured Molecula Weight	^r 10~15 kDa, observed by reducing SDS-PAGE.
Purity	> 98% as analyzed by SDS-PAGE.
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	Reconstituted in ddH₂O or PBS at 100 μg/ml.
Endotoxin Level	< 0.2 EU/µg, determined by LAL method.
Storage	Lyophilized recombinant Rat MCP-1/CCL2 remains stable up to 6 months at lower than - 70°C from date of receipt. Upon reconstitution, Rat MCP-1/CCL2 should be stable up to 1 week at 4°C or up to 3 months at -20°C.
Note	For research use only

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