

Rev03
Update: Dec,14,2021

DATASHEET

MCP-1/CCL2, Rat

Cat. No.: Z03285

Product Introduction

Species	Rat
Protein Construction	MCP-1 (Gln24-Asn148) Accession # P14844
Purity	> 98% as analyzed by SDS-PAGE
Endotoxin Level	< 0.2 EU/μg of protein by gel clotting method
Biological Activity	The EC ₅₀ value of rat MCP-1/CCL2 on Ca ²⁺ mobilization assay in CHO-K1/G15/rCCR2 cells (human G15 and rat CCR2 stably expressed in CHO-K1 cells) is less than 0.3 μg/ml.
Expression System	HEK 293
Apparent Molecular Weight	10~15 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH ₂ O or PBS up to 100 μg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Background

Target Background : 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 pathogenesis of several types of disease 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.

Synonyms : MCAF; JE; Monocyte Chemotactic Protein-1; CCL2; MCP1

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.