

## **DATASHEET** Version 20181206

## MCP-1/CCL2, Mouse

Cat. No.: Z03284-5

**Size**: 5.0 ug

Synonyms: MCP-1, MCAF, JE, Monocyte Chemo-

tactic Protein-1 (MCP-1), CCL2

## **Description:**

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 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.

Recombinant mouse MCP-1/CCL2 produced in HEK293 cells is a polypeptide chain containing 73 amino acids. A fully biologically active molecule, rmMCP-1/CCL2 has a molecular mass of 8 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

## **Amino Acid Sequence:**

00001 QPDAVNAPLT CCYSFTSKMI PMSRLESYKR ITSSRCPKEA 00041 VVFVTKLKRE VCADPKKEWV GTYIKNLDRN GMR Source: HEK 293
Species: Mouse

**Biological Activity**: The EC $_{50}$  value of mouse MCP-1/CCL2 on Ca $^{2+}$  mobilization assay in CHO-K1/Ga15/mCCR2 cells (human Ga15 and mouse CCR2 stably expressed in CHO-K1 cells) is less than 0.3  $\mu$ g/ml.

**Molecular Weight**: 8 kDa, observed by reducing SDS-PAGE.

**Formulation**: Lyophilized after extensive dialysis against PBS.

**Reconstitution**: Reconstituted in ddH<sub>2</sub>O or PBS at 100 µg/ml.

Purity: > 98% as analyzed by SDS-PAGE.

**Endotoxin Level**: < 0.2 EU/µg, determined by LAL method.

**Storage**: Lyophilized recombinant Mouse MCP-1/CCL2 remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Mouse MCP-1/CCL2 should be stable up to 1 week at 4°C or up to 3 months at -20°C.