

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant MCP-1/CCL2, Rat

Catalog Number: BK0321-5µg

Source: HEK 293

Quantity: 5µg

Description:

Chemokine (C-C motif) ligand 2 (CCL2) is also referred to as monocyte chemoattractant 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 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 at GenScript.

Molecular Weight:

10~15 kDa, observed by reducing SDS-PAGE.

Purity:

> 98% as analyzed by SDS-PAGE.

Biological Activity:

The EC₅₀ value of rat MCP-1/CCL2 on Ca²⁺ mobilization assay in CHO-K1/G 15/rCCR2 cells (human G 15 and rat CCR2 stably expressed in CHO-K1 cells) is less than 0.3 µg/ml.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

QPDVNAPLTCCYSFTGKMIPMSR-
LENYKRITSSRCPKEAV-
VFVTKLKREICADPNKEWVQKYIRK-
LDQNQVRSETTVFYKIASTLRTSAP-
LNVNLTHKSEANASTLTFSTTTTSSTSVEVTSMTEN

Endotoxin:

< 0.2 EU/µg, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O or PBS at 100 µg/ml.

Storage:

Lyophilized recombinant Rat MCP-1/CCL2 remains stable up to 6 months at -80 °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.

Usage:

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