

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant MCP-1/CCL2, Human

Catalog Number: BK0125-5µg

Source: Escherichia coli.

Quantity: 5µg

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. Human CCL2 cDNA encodes a 99 amino acid (aa) precursor protein with a 23 aa signal peptide and a 76 aa mature protein. Human CCL2 shares 78-79% aa identity with canine, porcine and equine CCL2, while mouse and rat express a form of CCL2 that is extended by 49 aa and shares only ~56% aa identity within the common region. Recombinant Human MCP-1/CCL2 produced in E.coli is a single non-glycosylated polypeptide chain containing 76 amino acids. A fully biologically active molecule, rhMCP-1/CCL2 has a molecular mass of 8.7 kD analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Molecular Weight:

8.7 kDa, observed by reducing SDS-PAGE.

Purity:

> 95% as analyzed by SDS-PAGE.

Biological Activity:

The EC₅₀ value of human MCP-1/CCL2 on Ca²⁺ mobilization assay in CHO-K1/Gα15/hCCR2 cells (human Gα15 and human CCR2 stably expressed in CHO-K1 cells) is less than 1µg/ml.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

QPDAINAPVTCCYNFTNRKISVQRLASYR-
RITSSKCPKEAVIFK-
TIVAKEICADPKQKWVQDSMDHLDKQTQTPKT

Endotoxin:

< 0.2 EU/µg, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O or PBS at 100 µg/ml.

Storage:

Lyophilized recombinant Human MCP-1/CCL2 remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, human 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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