

MCP-3/CCL7, Rat

Cat. No.: Z02958-1

Size: 1.0 mg

Synonyms: C-C motif chemokine 7, Monocyte chemoattractant protein 3, Monocyte chemotactic protein 3, MCP-3, Small-inducible cytokine A7, Ccl7, Mcp3, Scya7.

Description:

Monocyte Chemotactic Protein-3 (MCP3) and CCL7 are two monocyte chemotactic proteins produced by human MG63 osteosarcoma cells. Both MCP3 and CCL7 are members of the CC family of chemokines and share 62% and 71% amino acid sequence identity, respectively, with MCP1. CCL7 also shares 58% amino acid identity with MCP3. Similarly to other CC chemokines, all three MCP proteins are monocyte chemoattractants. In addition, the three MCPs can chemoattract activated NK cells as well as CD4+ and CD8+ T lymphocytes. All three cytokines have also been shown to attract eosinophils and induce histamine secretion from basophils.

Amino Acid Sequence:

00001 QPDGTNSSTC CYVKKQKIPK RNLKSYRKIT SSRCPWEAVI
00041 FKTKKGMVEVC AEAHQKWVEE AIAYLDMKTS TPKP

Source: *E. coli*

Species: Rat

Biological Activity: Fully biologically active when compared to standard. The biologically active determined by a chemotaxis bioassay using human monocytes is in a concentration range of 10-100 ng/ml.

Molecular Weight: Approximately 8.5 kDa, a single non-glycosylated polypeptide chain containing 74 amino acids.

Formulation: Lyophilized from a 0.2 µm filtered concentrated solution in 2 × PBS, pH 7.4.

Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Reconstitution: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Purity: > 95 % by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1 EU/µg of rRtMCP-3/CCL7 as determined by LAL method.

Storage: This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze/thaw cycles.