RECOMBINANT HUMAN MONOCYTE CHEMOTACTIC PROTEIN-3 (hMCP-3/CCL7)

Catalog # 02666 10 mg per vial Catalog # 02866 50 mg per vial

PRODUCT DESCRIPTION:

Monocyte chemotactic protein-3 (MCP-3) is a member of the β (CC) family of chemokines. It is produced by fibroblasts, platelets, MG63 osteosarcoma cells, mast cells and monocytes. MCP-3 is a chemoattractant for monocytes, NK cells, T cells, eosinophils, basophils, dendritic cells and neutrophils. MCP-3 binds to CCR2 and CCR3 receptors. Human MCP-3 cDNA encodes a 99 amino acid residue precursor protein containing a 23 amino acid signal peptide. Recombinant mature human MCP-3 contains 76 amino acid residues and it has an apparent molecular mass of 9 kDa.

SOURCE:

A DNA sequence encoding the mature human MCP-3 protein was expressed in *E. coli*.

PURITY:

Greater than 97%, as determined by SDS-PAGE and visualized by silver stain. Endotoxin level less than 0.1 ng per 1 µg of the cytokine as determined by the LAL method.

FORMULATION:

Lyophilized from a sterile solution in 30% acetonitrile, 0.1% TFA containing 50 μ g of bovine serum albumin per 1 μ g of cytokine.

RECONSTITUTION:

It is recommended that sterile PBS containing at least 0.1% human serum albumin or bovine serum albumin be added to the vial to prepare a stock solution of no less than 10 μ g/mL of the cytokine.

STABILITY/STORAGE:

Lyophilized samples are stable for greater than six months at -20°C to -70°C. Reconstituted human MCP-3/CCL7 can be stored under sterile conditions at 2° to 4°C for one month or at -20°C to -70°C for three months without detectable loss of activity.

Avoid repeated freeze-thaw cycles.

ACTIVITY:

Activity was determined by ability to chemoattract 2 day cultured human monocytes and THP-1 cells. The ED₅₀ for these effects were typically $0.02 - 0.08 \,\mu\text{g/mL}$ and $0.02 - 0.06 \,\mu\text{g/mL}$, respectively.

THIS REAGENT IS FOR RESEARCH USE ONLY. IT IS NOT TO BE ADMINISTERED TO HUMANS.

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