DATASHEET
Version 20181206

MIP-4/CCL18, Human

Cat. No.: Z02841-10

Size: 10.0 ug

Synonyms: MIP-4/CCL18, Human;

Description:

CCL18, is a novel CC chemokine that is highly homologous to MIP-1ª (61% amino acid sequence identity). CCL18 cDNA encodes an 89 aa residue precursor protein with a 20 aa putative signal peptide that is cleaved to generate a 69 aa residue mature protein which lacks potential glycosylation sites. In vitro, CCL18 mRNA expression is induced in alternatively activated macrophages by Th2 cytokines such as IL-4, IL-10 and IL-13, and inhibited by IFN-Î³. CCL18 mRNA is also expressed by GM-CSF/IL-4-induced monocyte-derived dendritic cells. In vivo, CCL18 is highly expressed in lung and placenta but is not expressed in epidermal Langerhans cells. Recombinant CCL18 has been shown to chemoattract naive T cells, but not monocytes or neutrophils.

Amino Acid Sequence:

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00001 AQVGTNKELC CLVYTSWQIP QKFIVDYSET SPQCPKPGVI
00041 LLTKRGRQIC ADPNKKWVQK YISDLKLNA
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Source: *E. coli*

Species: Human

Biological Activity: Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using human T-lymphocytes is in a concentration of 1.0-10 ng/ml.

Molecular Weight: Approximately 7.9 kDa, a single non-glycosylated polypeptide chain containing 69 amino acids.

Formulation: Lyophilized from a 0.2 μm filtered concentrated solution in 20 mM PB, pH 7.4, 100 mM NaCl.

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: > 97 % by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1 EU/μg of rHuMIP-4/CCL18 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.

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