

# MIP-3/CCL23

Catalog # PVGS1098

## Specification

## MIP-3/CCL23 - Product Information

Primary Accession **Species** Human <u>P55773</u>

Sequence Arg22-Asn120

Purity > 97% as analyzed by SDS-PAGE<br>> 97% as analyzed by HPLC

**Endotoxin Level** < 1 EU/ μg of protein by LAL method

**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 10.0-50.0 ng/ml.

Expression System E. coli

**Theoretical Molecular Weight** 11.4 kDa

Formulation

Lyophilized from a 0.2 µm filtered solution in 20 mM PB, pH 7.4, 150 mM NaCl.

Reconstitution

It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml.

**Storage & Stability** Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

### MIP-3/CCL23 - Additional Information

Gene ID 6368

**Other Names** 

C-C motif chemokine 23, CK-beta-8, CKB-8, Macrophage inflammatory protein 3, MIP-3, Myeloid progenitor inhibitory factor 1, MPIF-1, Small-inducible cytokine A23, CCL23(19-99), CCL23(22-99), CCL23(27-99), CCL23(30-99), CCL23, MIP3, MPIF1, SCYA23



#### Target Background

MIP-3/CCL23 is a CC chemokine that signals through the CCR1 receptor. MIP-3 chemoattracts monocytes, resting T-lymphocytes and neutrophils, but does not chemoattract activated lymphocytes. Additionally, MIP-3 has been shown to inhibit colony formation of bone marrow myeloid immature progenitors. Alternative splicing of the MPIF1 gene results in two mRNAs that encode a short (CKβ8) and a long (CKβ81) isoform of the chemokine. CKβ8 cDNA encodes a 120 amino acid (aa) residue precursor protein with a putative 21 aa residue signal peptide that is cleaved to generate a 99 aa residue mature CKβ8 (aa 22 120). Additional N terminal processing of the 99 aa residue variant can generate a 75 aa residue CKβ8 (aa 46 120) that is significantly more active than the 99 aa residue variant.

#### MIP-3/CCL23 - Protein Information

Name CCL23

Synonyms MIP3, MPIF1, SCYA23

#### Function

Shows chemotactic activity for monocytes, resting T- lymphocytes, and neutrophils, but not for activated lymphocytes. Inhibits proliferation of myeloid progenitor cells in colony formation assays. This protein can bind heparin. Binds CCR1. CCL23(19-99), CCL23(22-99), CCL23(27-99), CCL23(30-99) are more potent chemoattractants than CCL23.

Cellular Location Secreted.

Tissue Location

High levels in adult lung, liver, skeletal muscle and pancreas. Moderate levels in fetal liver, adult bone marrow and placenta. The short form is the major species and the longer form was detected only in very low abundance. CCL23(19-99), CCL23(22-99), CCL23(27-99), CCL23(30-99) are found in high levels in synovial fluids from rheumatoid patients.

#### MIP-3/CCL23 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

MIP-3/CCL23 - Images