

# Macrophage Inflammatory Protein-3 beta (CCL19), human recombinant (rHuMIP-3b)

Catalog No: 94846 Lot No: XXXXX Source: *E. coli* 

Synonyms: Small inducible cytokine A19, CCL19, Macrophage inflammatory protein 3 beta, MIP-3- beta, EBI1-ligand

chemokine, ELC, Beta chemokine exodus-3, CK beta-11, chemokine (C-C motif) ligand 19, CKb11, MIP3B,

MIP-3b, SCYA19, MGC34433

### **Background**

Chemokine (C-C motif) ligand 19 (CCL19) is a small cytokine belonging to the CC chemokine family that is also known as EBI1 ligand chemokine (ELC) and macrophage inflammatory protein-3-beta (MIP-3-beta). CCL19 is expressed abundantly in thymus and lymph nodes, with moderate levels in trachea and colon and low levels in stomach, small intestine, lung, kidney and spleen. The gene for CCL19 is located on human chromosome 9. This chemokine elicits its effects on its target cells by binding to the chemokine receptor chemokine receptor CCR7. It attracts certain cells of the immune system, including dendritic cells and antigen-engaged B cells.

#### Description

Macrophage Inflammatory protein-3 beta human recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 77 amino acids and having a molecular mass of 8809 Dalton. MIP-3b is purified by proprietary chromatographic techniques.

### **Physical Appearance**

Sterile filtered white lyophilized (freeze-dried) powder.

#### **Formulation**

Lyophilized without any additives.

#### Solubility

It is recommended to reconstitute the lyophilized MIP-3b in sterile 18 M $\Omega$ -cm H $_2$ O not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

## Stability

Lyophilized MIP-3b, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CCL19 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

## Purity

Greater than 98.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

# **Amino Acid Sequence**

GTNDAEDCCL SVTQKPIPGY IVRNFHYLLI KDGCRVPAVV FTTLRGRQLC APPDQPWVER IIQRLQRTSA KMKRRSS





# Activity

The Activity of CCL19 is calculated by the ability to chemoattract Human T cells using a concentration of 10 - 50 ng/ml corresponding to a specific activity of 20,000 - 100,000 IU/mg.

## Usage

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