

Product Data Sheet

Cat # RP-1043 Recombinant Mouse Macrophage Inflammatory protein-3 beta (CCL19)

**Size:** 5 ug

Chemokine (C-C motif) ligand 19 (CCL19) is a small cytokine belonging to the CC chemokine B family that is also known as EB1 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.

**Source:** *Escherichia Coli*. Macrophage Inflammatory Protein-3 beta Mouse Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 83 amino acids and having a molecular mass of 9216 Dalton. The MIP-3b is purified by proprietary chromatographic techniques. The CCL19 was lyophilized from a concentrated (1mg/ml) solution in water containing no additives.

**Applications and Suggested Dilutions:** Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE. It is recommended to reconstitute the lyophilized Macrophage Inflammatory Protein-3b in sterile 18MΩ-cm H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions. Users must optimize the appropriate concentration and conditions for each assay.

**Storage and 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). If supplied in powder then reconstitute it in 100 ul water for 1 mg/ml stock and store in liquid at 4°C for ~1 week or aliquots in suitable size and store at -20°C for long term storage.  
**Please prevent freeze-thaw cycles.**

**Biological Activity:** The Activity of CCL19 is calculated by the ability to chemoattract Human mature dendritic cells using a concentration of 10-100 ng/ml.

**Protein content:** Protein quantitation was carried out by two independent methods: 1. UV spectroscopy at 280 nm using the absorbency value of 0.91 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics). 2. Analysis by RP-HPLC, using a calibrated solution of MIP-3b as a Reference Standard.

**Usage:**

This item is for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals

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