



## Macrophage-Derived Chemokine, mouse recombinant (CCL22) (rmCCL22)

**Catalog No:** 99964  
**Lot No:** XXXXX  
**Source:** *E. coli*  
**Synonyms:** C-C motif chemokine 22, Small-inducible cytokine A22, Macrophage-derived chemokine, MDC(1-69), Stimulated T-cell chemotactic protein 1, CC chemokine STCP-1, CCL22, MDC, SCYA22, ABCD-1, DC/B-CK, MGC34554, A-152E5.1, CC chemokine ABCD-1, Activated B and dendritic cell-derived, DCBCK

### Background

MDC (CCL22) is a small cytokine that belongs to the CC chemokine family. CCL22 is one of several Cys-Cys (CC) cytokine genes clustered on the q arm of chromosome 16. MDC shows chemotactic activity for natural killer cells, chronically activated T lymphocytes, monocytes and dendritic cells. On the other hand, MDC shows a mild activity for primary activated T lymphocytes and has no hemoattractant activity for neutrophils, eosinophils and resting T lymphocytes. MDC may also have a role in the trafficking of activated T lymphocytes to inflammatory sites and other aspects of activated T lymphocyte physiology. CCL22 interacts with cell surface chemokine receptor CCR4. CCL22 is vastly expressed in macrophages, in monocyte-derived dendritic cells and the thymus. CCL22 is also found in the lymph node, appendix, activated monocytes, and resting and activated macrophages. Lower expression of CCL22 can be seen in the lung and spleen and very weak expression can be seen in the small intestine.

### Description

CCL22 Mouse Recombinant, produced in *E. coli*, is a non-glycosylated polypeptide chain containing 68 amino acids. It has a molecular mass of 7.8 kDa. The Mouse CCL22 is purified by proprietary chromatographic techniques.

### Physical Appearance

Filtered, white lyophilized (freeze-dried) powder.

### Formulation

CCL22 filtered (0.2 µm) and lyophilized from a concentrated solution containing 20 mM phosphate buffer and 150 mM NaCl, pH 7.4.

### Solubility

It is recommended to reconstitute the lyophilized CCL22 in sterile 18 MΩ-cm H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

### Stability

Lyophilized CCL22, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CCL22 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 97% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

### Amino Acid Sequence

GPYGANVEDS ICCQDYIRHP LPSRLVKEFF WTSKSCRKPG VVLITVKNRD ICADPRQVWV KLLHLKLS

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**Activity**

Determined by its ability to chemoattract human activated lymphocytes, using a concentration range of 10-100 ng/ml corresponding to a specific activity of 10,000-100,000 IU/mg.

**Usage**

**This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH.**