



Macrophage-Derived Chemokine, human recombinant (CCL22), His Tag (rhuMDC)

Catalog No: 99961
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

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 chemoattractant 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. In the lymph node, CCL22 is expressed in a mature subset of Langerhans' cells (CD1a+ and CD83+). Furthermore, CCL22 is expressed in atopic dermatitis, allergic contact dermatitis skin, and psoriasis, in both the epidermis and dermis. In addition, MDC has a role in hindering progression of lung cancer. Moreover, significantly higher CCL22 expression is linked to gastric cancer.

Description

MDC Human Recombinant, produced in *E. coli*, is a non-glycosylated polypeptide chain containing 90 amino acids (25-93 aa). It has a molecular mass of 10.3 kDa. The MDC is fused to a 20 amino acid His-Tag at the N-terminus and is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered colorless solution.

Formulation

The MDC protein contains phosphate-buffered saline/PBS (pH 7.4) and 10% glycerol.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store frozen at -20°C for longer periods of time. For long term storage, it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Purity

Greater than 95% as determined by SDS-PAGE.

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.

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