9051 Mira Mesa Blvd, #910094
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MDC Human

Macrophage-Derived Chemokine Human Recombinant (CCL22)
CHK0113

Product Overview

Name	MDC Human
Description	
Macrophage-Derived Chemokine Human Recombinant (CCL22)	
Accession (Primary)	O00626
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.	
Introduction	
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. MDC interacts with cell surface chemokine receptors CCR4. CCL22 is vastly expressed in macrophage and in monocyte-derived dendritic cells, and thymus. CCL22 is also found in the lymph node, appendix, activated monocytes, resting and activated macrophages. Lower expression of CCL22 can be seen in the lung and the spleen and very weak expression 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.	
Source	
Escherichia Coli.	
Physical Appearance	
Filtered White lyophilized (freeze-dried) powder.	
Formulation	
CCL22 filtered (0.4 μm) and lyophilized from a concentrated solution containing 20mM phosphate buffer & 500mM NaCl pH-7.4.	

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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 97.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Amino acid sequence

GPYGANMEDS VCCRDYVRYR LPLRVVKHFY WTSDSCPRPG VVLLTFRDKE ICADPRVPWV KMILNKLSQ.

Biological Activity

Determined by its ability to chemoattract human T cells using a concentration range of 10ng-100ng/ml corresponding to a Specific Activity of 10,000-100,000IU/mg.

Solubility

It is recommended to reconstitute the lyophilized CCL22 in sterile 18MΩ-cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions. Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

Precautions

MDC Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (O00626)