9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

MDC Rat

Macrophage-Derived Chemokine (CCL22) Rat Recombinant
CHK0116

Product Overview

Name	MDC Rat
Description	
Macrophage-Derived Chemokine (CCL22) Rat Recombinant	
Accession (Primary)	Q91ZH5
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.	
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	
Sterile Filtered White lyophilized (freeze-dried) powder.	
Formulation	
The protein was lyophilized from a 0.2 μm filtered concentrated solution in 1×PBS, pH7.4.	

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Stability

Lyophilized MDC although stable at room temperature for 3 weeks, should be stored desiccated below -18C. Upon reconstitution MDC should be stored at 4C between 2-7 days and for future use below -18C. 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

GPYGANVEDS ICCQDYIRHP LPPRFVKEFY WTSKSCRKPG VVLITIKNRD ICADPRMLWV KKILHKLA.

Biological Activity

Determined by its ability to chemoattract human activated lymphocytes using a concentration range of 10.0-100.0 ng/ml.

Solubility

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

Precautions

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

Target Information: (Q91ZH5)