

MDC, human recombinant protein
C-C motif chemokine 22, Small-inducible cytokine A22, Macrophage-derived chemokine, MDC (1-69), Stim
Catalog # PBV10332r

Specification

MDC, human recombinant protein - Product info

Primary Accession [O00626](#)
Calculated MW **8.1 kDa** KDa

MDC, human recombinant protein - Additional Info

Gene ID **6367**
Gene Symbol **CCL22**

Other Names

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.

Gene Source	Human
Source	E. coli
Assay&Purity	SDS-PAGE; ≥97%
Assay2&Purity2	HPLC; ≥97%
Recombinant	Yes
Results	10,000-100,000IU/mg.
Sequence	GPYGANMEDS VCCR DYVRYR LPLRVVKHFY WTS DSCPRPG VLLTFRDKE ICADPRVPWV KMILNKLSQ.

Target/Specificity

MDC

Application Notes

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.

Format

Lyophilized protein

Storage

-20°C; CCL22 filtered (0.4 µm) and lyophilized from a concentrated solution containing 20mM phosphate buffer & 500mM NaCl pH-7.4.

MDC, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

MDC, human recombinant protein - Images

MDC, human recombinant protein - 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 chemo attractant 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.

MDC, human recombinant protein - References

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Godiska R., et al. J. Exp. Med. 185:1595-1604(1997).
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