



Anti-Human MDC

20150304ML



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	101-M77
Size:	500 µg
Lot. No.:	According to product label

Preparation: Monoclonal antibodies were produced in BALB/c X ICR F1 mice using recombinant human MDC as the immunizing antigen. This IgG1K antibody was purified from ascites fluid followed by Protein A affinity chromatography.

Target Background

Synonyms (Target):	CCL22; MDC; ABCD-1; SCYA22; STCP-1; DC/B-CK; A-152E5.1
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MDC or CCL22, also named stimulated T cell chemotactic protein (STCP-1), is a CC chemokine initially isolated from clones of monocyte-derived macrophages. Human MDC cDNA encodes a precursor protein of 93 amino acid residues with a 24 amino acid residue predicted signal peptide that is cleaved to yield a 69 amino acid residue mature 8 kDa protein. At the amino acid sequence level, MDC shows less than 35% identity to other CC chemokine family members. Human MDC is expressed in dendritic cells, macrophages and activated monocytes. In addition, MDC expression is also detected in the tissues of thymus, lymph node and appendix. The gene for human MDC has been mapped to chromosome 16 rather than chromosome 17 where the genes for many human CC chemokines are clustered. Recombinant or chemically synthesized mature MDC has been shown to induce chemotaxis or Ca²⁺ mobilization in dendritic cells, IL2 activated NK cells, and activated T lymphocytes. A CD8⁺ T lymphocyte-derived secreted soluble activity that suppresses infection by primary non-syncytium-inducing and syncytium-inducing HIV1 isolates and the T cell line-adapted isolate HIV1 IIIB, has been identified as MDC. Based on aminoterminal sequence analysis, the major CD8 + T lymphocyte derived MDC protein yielded an aminoterminal sequence of YGANM, which is two amino acid residues shorter than the predicted mature MDC. The difference in potency between the two mature MDC isoforms has not been determined.

Database References Target

Protein RefSeq:	NP_002381
Uniprot ID:	O75078
mRNA RefSeq:	NM_002390

Product Specifications

Species reactivity	Human
Cross reactivity	Human
Host	Mouse
Clonality	Monoclonal Antibody
Purification	Protein A chromatography
Immunogen	Recombinant Human MDC
Formulation	lyophilized
Reconstitution buffer	water

Reconstitution: Reconstitute the antibody in sterile water to a concentration of 0.1 - 1.0 mg/ml.

Stability: Lyophilized antibody is stable at room temperature for up to 1 month. The reconstituted antibody is stable for at least 2 weeks at 2-8°C. Frozen aliquots are stable for at least 6 months when stored at -20°C.



AVOID REPEATED FREEZE AND THAW CYCLES!

Applications

ELISA: In a sandwich ELISA (assuming 100 µl/well), a concentration of 1-2 µg/ml of this antibody will detect at least 0.03 ng/well of recombinant human MDC when used with biotinylated antigen affinity purified anti-human MDC as the detection antibody at a concentration of at least 1 µg/ml.

Western Blot: To detect h MDC by Western Blot use 0.25 - 0.5 µg/ml.

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!