Mouse CCL22/MDC Antibody

Monoclonal Rat IgG_{2A} Clone # 158132

Catalog Number: MAB4391

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CCL22/MDC in ELISAs and Western blots. In Western blots, this antibody shows 25% cross-reactivity with recombinant viral MIP-II and no cross-reactivity with rmCCL1, 2, 3, 4, 6, 7, CCL9/10/MIP-1γ, 11, 12, 19, 20, 21, 22, 24, 25, 27, rhCCL1, 2, 3, 4, 5, 7, 8, 11, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 28, or rrCCL20.
Source	Monoclonal Rat IgG_{2A} Clone # 158132
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant mouse CCL22/MDC Gly25-Ser92 Accession # O88430
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

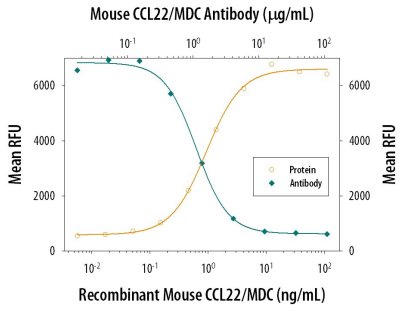
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

Mouse CCL22/MDC Sandwich Immunoassay		**Reagent**
ELISA Capture	2-8 µg/mL	Mouse CCL22/MDC Antibody (Catalog # MAB4391)
ELISA Detection	0.1-0.4 µg/mL	Mouse CCL22/MDC Biotinylated Antibody (Catalog # BAF439)
Standard		Recombinant Mouse CCL22/MDC (Catalog # 439-MD)
Neutralization	Measured by its ability to neutralize CCL22/MDC-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human CCR4. The Neutralization Dose (ND_{50}) is typically 0.4-2.0 µg/mL in the presence of 10 ng/mL Recombinant Mouse CCL22/MDC.	

DATA

Neutralization



Chemotaxis Induced by CCL22/MDC and Neutralization by Mouse CCL22/MDC Antibody. Recombinant Mouse CCL22/MDC (Catalog # 439-MD) chemoattracts the BaF3 mouse pro-B cell line transfected with human CCR4 in a dose-dependent manner (orange line). The amount of cells that migrated through to the lower chemotaxis chamber was measured by Resazurin (Catalog # AR002). Chemotaxis elicited by Recombinant Mouse CCL22/MDC (10 ng/mL) is neutralized (green line) by increasing concentrations of Mouse CCL22/MDC Monoclonal Antibody (Catalog # MAB4391). The ND_{50} is typically 0.4-2.0 µg/mL.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

Mouse CCL22/MDC Antibody

Monoclonal Rat IgG_{2A} Clone # 158132

Catalog Number: MAB4391

BACKGROUND

CCL22, also known as ABCD-1 and MDC (macrophage-derived chemokine), is a CC chemokine cloned from activated mouse B cells. Mouse CCL22 cDNA encodes a precursor protein of 92 amino acid (aa) residues with a 24 aa residue predicted signal peptide that is cleaved to yield a 68 aa residue mature 7.8 kDa protein. At the amino acid sequence level, mouse and human CCL22 share 64% identity and 83% similarity. The genomic organization of the mouse and human CCL22 genes are very similar, exhibiting sequence identity at the intron-exon boundaries. Mouse CCL22 is expressed at high levels in dendritic cells and activated B lymphocytes. Low levels of mouse CCL22 mRNA are also detectable in lung, unstimulated spleen cells, lymph node cells and in thymocytes. CCL22 is a functional ligand for the CC chemokine receptor 4. Recombinant or chemically synthesized mature mouse CCL22 has been shown to induce chemotaxis or Ca^{2+} mobilization in activated mouse and human T cells.

References:

1. Schaniel, C. *et al.* (1998) J. Exp. Med. **188**:451.
2. Imai, T. *et al.* (1998) J. Biol. Chem. **273**:1764.
3. Godiska, R. *et al.* (1997) J. Exp. Med. **185**:1595.
4. Chang, M-S. *et al.* (1997) J. Biol. Chem. **272**:25229.