

DESCRIPTION

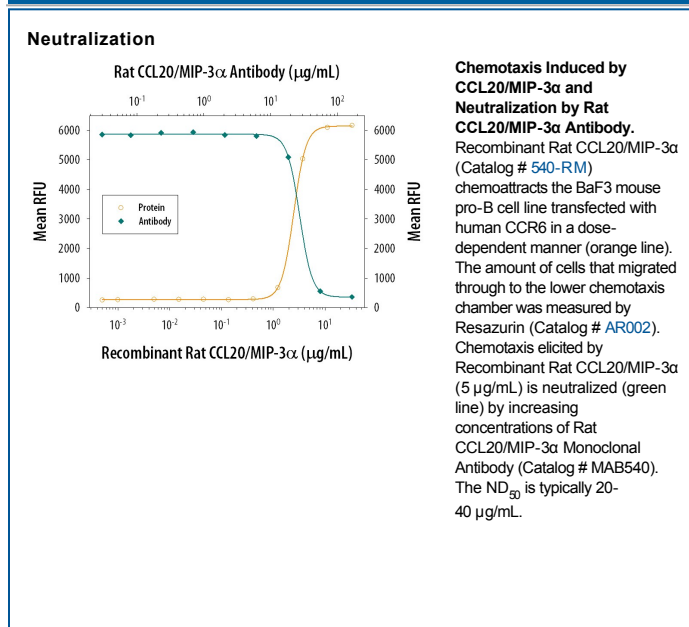
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|---------------------------|---|
| Species Reactivity | Rat |
| Specificity | Detects rat CCL20/MIP-3 α in ELISAs and Western blots. |
| Source | Monoclonal Mouse IgG ₁ Clone # 83225 |
| Purification | Protein A or G purified from ascites |
| Immunogen | <i>E. coli</i> -derived recombinant rat CCL20/MIP-3 α Ala26-Met96 Accession # P97884.1 |
| Endotoxin Level | <0.20 EU per 1 μ g of the antibody by the LAL method. |
| Formulation | Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m 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.

| | Recommended Concentration | Sample |
|--|----------------------------------|--|
| Western Blot | 1 μ g/mL | Recombinant Rat CCL20/MIP-3 α (Catalog # 540-RM) under non-reducing conditions only |
| Rat CCL20/MIP-3α Sandwich Immunoassay | | Reagent |
| ELISA Capture | 2-8 μ g/mL | Rat CCL20/MIP-3 α Antibody (Catalog # MAB540) |
| ELISA Detection | 0.1-0.4 μ g/mL | Rat CCL20/MIP-3 α Biotinylated Antibody (Catalog # BAF540) |
| Standard | | Recombinant Rat CCL20/MIP-3 α (Catalog # 540-RM) |
| Neutralization | | Measured by its ability to neutralize CCL20/MIP-3 α -induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human CCR6. The Neutralization Dose (ND ₅₀) is typically 20-40 μ g/mL in the presence of 5 μ g/mL Recombinant Rat CCL20/MIP-3 α . |

DATA



PREPARATION AND STORAGE

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|--------------------------------|--|
| 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. <ul style="list-style-type: none"> ● 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. |

BACKGROUND

CCL20, also known as MIP-3 α , LARC (Liver and Activation-regulated Chemokine) and as Exodus, is one of many novel β chemokines identified through bioinformatics. Rat CCL20 cDNA encodes a 96 amino acid (aa) precursor protein with a 25 aa putative signal peptide that is predicted to be cleaved to form the 71 aa mature secreted protein. CCL20 is distantly related to other β chemokines (20-28% aa sequence identity). Rat MIP-3 α shares approximately 70% and 61% aa sequence homology with mouse and human CCL20, respectively.

CCL20 has been shown to be expressed predominantly in lymph nodes, appendix, PBL, fetal liver, fetal lung, and epithelial cells of intestinal tissues. The expression of CCL20 is strongly up-regulated by inflammatory signals and down-regulated by the anti-inflammatory cytokine IL-10. Synthetic or recombinant CCL20 has been shown to be chemotactic for lymphocytes and dendritic cells, and inhibits proliferation of myeloid progenitors in colony formation assays. CCL20 has now been shown to be a unique functional ligand for CCR-6 (previously referred to as GPR-CY4, CKR-L3, or STRL22 orphan receptor), a chemokine receptor that is selectively and highly expressed in human dendritic cells derived from CD34⁺ cord blood precursors.

References:

1. Baba, M. *et al.* (1997) *J. Biol. Chem.* **272**:14893.
2. Hromas, R. *et al.* (1997) *Blood* **89**:3315.
3. Greaves, D.R. *et al.* (1997) *J. Exp. Med.* **186**: 857.
4. Tanaka, Y. *et al.* (1999) *Eur. J. Immunol.* **29**:633.