

DESCRIPTION

Species Reactivity	Rat
Specificity	Detects rat CCL20/MIP-3 α in ELISAs and Western blots. In sandwich immunoassays, less than 0.2% cross-reactivity with recombinant human (rh) MIP-3 α , recombinant mouse (rm) MIP-3 α , rhMIP-3 β and rmMIP-3 β is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant rat CCL20/MIP-3 α Ala26-Met96 Accession # P97884
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

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	0.1 μ g/mL	Recombinant Rat CCL20/MIP-3 α (Catalog # 540-RM)
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)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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.