

DESCRIPTION	
Species Reactivity	Mouse
Specificity	Detects mouse CCL20/MIP-3 α in direct ELISAs and Western blots. In direct ELISAs, 12% cross-reactivity with recombinant rat (rr) CCL20, 6% cross-reactivity with recombinant mouse (rm) CCL12 and recombinant human (rh) CCL25, and 3% cross-reactivity with with rmCCL9/10/MIP-1 γ is observed. No cross-reactivity with recombinant cotton rat CCL3, 4, 5, rhCCL1, 2, 3, 4, 5, 7, 8, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 27, 28, rmCCL1, 2, 3, 4, 5, 6, 7, 8, 11, 17, 19, 21, 22, 24, 25, 27, or 28 is observed.
Source	Monoclonal Rat IgG ₁ Clone # 114906
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse CCL20/MIP-3 α Ala28-Met97 Accession # O89093
Endotoxin Level	<0.10 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	2 μ g/mL	See Below
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 1-5 μ g/mL in the presence of 5 ng/mL Recombinant Mouse CCL20/MIP-3 α .	

DATA

Western Blot

Detection of Mouse CCL20 by Western Blot.
Western blot shows lysates of mouse small intestine. PVDF membrane was probed with 2 μ g/mL of Mouse CCL20/MIP-3 α Monoclonal Antibody (Catalog # MAB760) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). A specific band was detected for CCL20 at approximately 10 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Neutralization

Chemotaxis Induced by CCL20/MIP-3 α and Neutralization by Mouse CCL20/MIP-3 α Antibody.
Recombinant Mouse CCL20/MIP-3 α (Catalog # 760-M3) chemoattracts the BaF3 mouse pro-B cell line transfected with human CCR6 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 CCL20/MIP-3 α (5 ng/mL) is neutralized (green line) by increasing concentrations of Mouse CCL20/MIP-3 α Monoclonal Antibody (Catalog # MAB760). The ND₅₀ is typically 1-5 μ g/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. <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, and Exodus, is a β chemokine. Mouse CCL20 cDNA encodes a 97 amino acid precursor protein with a 27 aa putative signal peptide that is predicted to be cleaved to form the 70 aa mature secreted protein. CCL20 is distantly related to other β chemokines (20-28% aa sequence identity). Mouse CCL20 shares approximately 71 and 63% amino acid sequence homology with rat 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 upregulated by inflammatory signals and downregulated by the anti-inflammatory cytokine IL-10. CCL20 has been shown to be chemotactic for lymphocytes and dendritic cells, and inhibits proliferation of myeloid progenitors in colony formation assays. CCL20 is a functional ligand for CCR6 (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.