

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CCL19/MIP-3 β in direct ELISAs and Western blots. In direct ELISAs, less than 30% cross-reactivity with recombinant rat CCL19/MIP-3 β is observed and less than 10% cross-reactivity with recombinant human CCL19/MIP-3 β is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse CCL19/MIP-3 β Gly26-Val107 (Ser108LeuGlu) Accession # Q548P0
Endotoxin Level	<0.01 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.

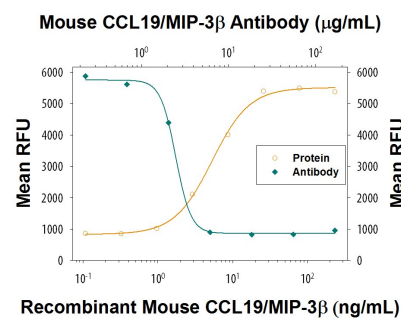
APPLICATIONS

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	0.1 μ g/mL	Recombinant Mouse CCL19/MIP-3 β (Catalog # 440-M3)
Immunocytochemistry	5-15 μ g/mL	See Below
Neutralization		Measured by its ability to neutralize CCL19/MIP-3 β -induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human CCR7. The Neutralization Dose (ND ₅₀) is typically 0.8-4 μ g/mL in the presence of 50 ng/mL Recombinant Mouse CCL19/MIP-3 β .

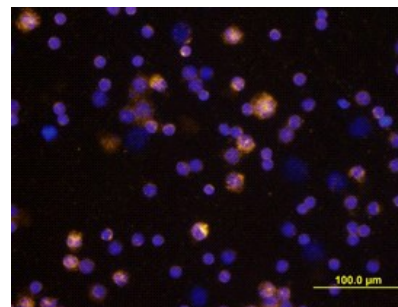
DATA

Neutralization



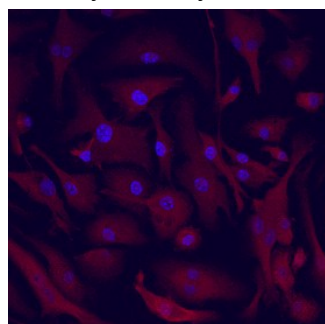
Chemotaxis Induced by CCL19/MIP-3 β and Neutralization by Mouse CCL19/MIP-3 β Antibody. Recombinant Mouse CCL19/MIP-3 β (Catalog # 440-M3) chemoattracts the BaF3 mouse pro-B cell line transfected with human CCR7 in a dose-dependent manner (orange line). The amount of cells that migrated through to the lower chemotaxis chamber was measured by Resazurin (Catalog # AR002). Chemotaxis elicited by Recombinant Mouse CCL19/MIP-3 β (50 ng/mL) is neutralized (green line) by increasing concentrations of Goat Anti-Mouse CCL19/MIP-3 β Antigen Affinity-purified Polyclonal Antibody (Catalog # AF880). The ND₅₀ is typically 0.8-4 μ g/mL.

Immunocytochemistry



CCL19/MIP-3 β in Mouse Splenocytes. CCL19/MIP-3 β was detected in immersion fixed mouse splenocytes using Goat Anti-Mouse CCL19/MIP-3 β Antigen Affinity-purified Polyclonal Antibody (Catalog # AF880) at 10 μ g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (yellow; Catalog # NL001) and counterstained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

Immunocytochemistry



CCL19/MIP-3 β in Mouse Dendritic Cells. CCL19/MIP-3 β was detected in immersion fixed mouse dendritic cells using Goat Anti-Mouse CCL19/MIP-3 β Antigen Affinity-purified Polyclonal Antibody (Catalog # AF880) at 10 μ g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

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. *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

CCL19/MIP-3 β , also known as ELC (EBI1-Ligand Chemokine), is a reported β chemokine that binds specifically to the chemokine receptor CCR7/EBI-1/BLR-2. Mouse (human) MIP-3 β cDNA encodes a 108 (98) amino acid residue precursor protein with a predicted 25 (21) aa residue signal peptide that is cleaved to form the 83 (77) aa residue mature secreted protein. MIP-3 β is distantly related to other β chemokines (20-30% aa sequence identity). Mouse MIP-3 β shares 83% aa sequence homology with human MIP-3 β . MIP-3 β has been shown to be constitutively expressed in various lymphoid tissues (including thymus, lymph nodes, appendix, and spleen) in dendritic cells within the T cell zone. The expression of MIP-3 β is down-regulated by the anti-inflammatory cytokine IL-10. Recombinant MIP-3 β has been shown to be chemotactic for T cells and B cells. The MIP-3 β receptor (CCR7/EBI-1/BLR-2) is expressed in various lymphoid tissues and activated B and T lymphocytes. CCR7 is also strongly up-regulated in B cells infected with Epstein-Barr virus and T cells infected with herpes virus 6 or 7.

References:

1. Kim, C.H. *et al.* (1998) *J. Immunol.* **160**:2418.
2. Ngo, V.N. *et al.* (1998) *J. Exp. Med.* **188**:181.
3. Rossi, D.L. *et al.* (1997) *J. Immunol.* **158**:1033.
4. Yoshida, R. *et al.* (1997) *J. Biol. Chem.* **272**:13803.