Mouse CXCL2/MIP-2 Antibody

Antigen Affinity-purified Polyclonal Goat IgG

Catalog Number: AF-452-NA

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CXCL2/MIP-2 in direct ELISAs and Western blots. In direct ELISAs, approximately 5% cross-reactivity with recombinant human (rh) GROα, rhGROβ, rhGROγ, recombinant rat (rr) CINC-1, rrCINC-2α, rrCINC-2β, and rrCINC-3 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant mouse CXCL2/MIP-2 Ala28-Asn100 Accession # P10889
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.

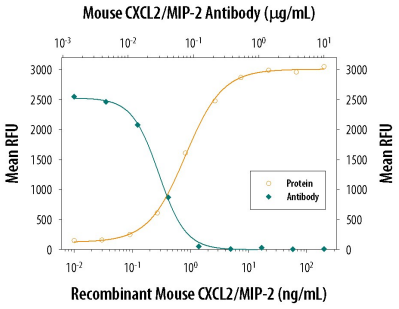
APPLICATIONS

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.*

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Mouse CXCL2/MIP-2 (Catalog # 452-M2)
Immunocytochemistry	5-15 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	Perfusion fixed frozen sections of mouse thymus
Neutralization	Measured by its ability to neutralize CXCL2/MIP-2-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human CXCR2. The Neutralization Dose (ND_{50}) is typically 0.015-0.075 µg/mL in the presence of 2 ng/mL Recombinant Mouse CXCL2/MIP-2.	

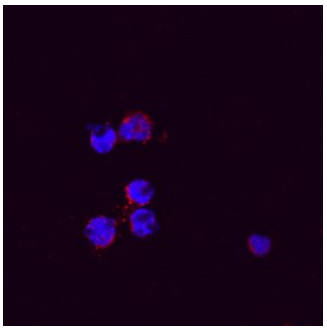
DATA

Neutralization



Chemotaxis Induced by CXCL2/MIP-2 and Neutralization by Mouse CXCL2/MIP-2 Antibody. Recombinant Mouse CXCL2/MIP-2 (Catalog # 452-M2) chemoattracts the BaF3 mouse pro-B cell line transfected with human CXCR2 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 CXCL2/MIP-2 (2 ng/mL) is neutralized (green line) by increasing concentrations of Goat Anti-Mouse CXCL2/MIP-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF-452-NA). The ND_{50} is typically 0.015-0.075 µg/mL.

Immunocytochemistry



CXCL2/MIP-2 in Mouse Splenocytes. CXCL2/MIP-2 was detected in immersion fixed mouse splenocytes stimulated with LPS and monensin using Goat Anti-Mouse CXCL2/MIP-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF-452-NA) at 10 µg/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). Specific staining was localized to cytoplasm. 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.** ● 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 CXCL2/MIP-2 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF-452-NA

BACKGROUND

Macrophage Inflammatory Protein-2 (MIP-2) was originally identified as a heparin-binding protein secreted from a murine macrophage cell line in response to endotoxin stimulation. Based on its protein and DNA sequences, MIP-2 is a member of the alpha (C-X-C) subfamily of chemokines.

MIP-2 cDNA encodes a 100 amino acid residue precursor protein from which the amino-terminal 27 amino acid residues are cleaved to generate the mature MIP-2. The protein sequence of murine MIP-2 shows approximately 63% identity to that of murine KC, another murine alpha chemokine whose expression is induced by PDGF. In addition, the protein sequence of MIP-2 is also 60% identical to human GROβ and GROγ. It has been suggested that mouse KC and MIP-2 are the homologs of the human GROs and rat CINCs.

Similarly to other alpha chemokines, murine MIP-2 is a potent neutrophil attractant and activator. MIP-2 and KC can bind the murine interleukin 8 type B receptor homologue with high affinity. The expression of MIP-2 was found to be associated with neutrophil influx in pulmonary inflammation and glomerulonephritis, suggesting that MIP-2 may contribute to the pathogenesis of inflammatory diseases.