

DESCRIPTION

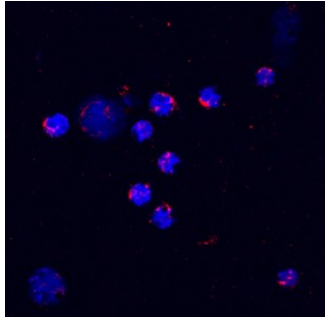
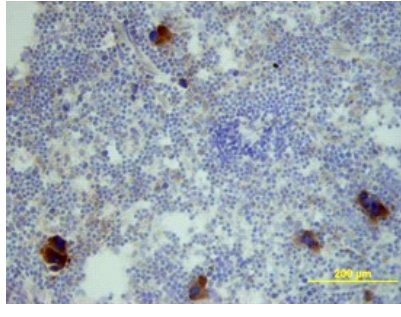
Species Reactivity	Mouse
Specificity	Detects mouse CXCL2/MIP-2 in ELISAs and Western blots. In sandwich immunoassays, less than 0.05% cross-reactivity with recombinant human (rh) GRO β , rhGRO γ , recombinant mouse (rm) C10, rmMIP-1 α , rmMIP-1 β , rhRANTES, and rmKC is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse CXCL2/MIP-2 (R&D Systems, Catalog # 452-M2) Ala28-Asn100 Accession # P10889
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 Mouse CXCL2/GRO β /MIP-2/CINC-3 (Catalog # 452-M2)
Immunocytochemistry	5-15 μ g/mL	See Below
Immunohistochemistry	5-15 μ g/mL	See Below
Mouse CXCL2/MIP-2 Sandwich Immunoassay		Reagent
ELISA Capture	2-8 μ g/mL	Mouse CXCL2/GRO β /MIP-2/CINC-3 Antibody (Catalog # MAB452)
ELISA Detection	0.1-0.4 μ g/mL	Mouse CXCL2/GRO β /MIP-2/CINC-3 Biotinylated Antibody (Catalog # BAF452)
Standard		Recombinant Mouse CXCL2/MIP-2 (Catalog # 452-M2)

DATA

Immunocytochemistry	Immunohistochemistry
 <p>CXCL2/GROβ/MIP-2/CINC-3 in Mouse Splenocytes. CXCL2/GROβ/MIP-2/CINC-3 was detected in immersion fixed mouse splenocytes stimulated with LPS and monensin using Mouse CXCL2/GROβ/MIP-2/CINC-3 Biotinylated Antigen Affinity-purified Polyclonal Antibody (Catalog # BAF452) at 10 μg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Streptavidin (red; Catalog # NL999) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Non-adherent Cells.</p>	 <p>CXCL2/GROβ/MIP-2/CINC-3 in Mouse Spleen. CXCL2/GROβ/MIP-2/CINC-3 was detected in immersion fixed frozen sections of mouse spleen using Mouse CXCL2/GROβ/MIP-2/CINC-3 Biotinylated Antigen Affinity-purified Polyclonal Antibody (Catalog # BAF452) at 15 μg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for Chromogenic IHC Staining of Frozen Tissue Sections.</p>

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

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 GRO β and GRO γ . It has been suggested that mouse KC and MIP-2 are the homologs of the human GROs and rat CINC3s.

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.