Mouse CXCL2/GROβ/MIP-2/CINC-3 Biotinylated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: BAF452

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) GROβ, rhGROγ, recombinant mouse (rm) C10, rmMIP-1α, rmMIP-1β, rmRANTES, and rmKC is observed.

Source  Polyclonal Goat IgG
Purification  Antigen Affinity-purified
Immunogen  E. coli-derived recombinant mouse CXCL2/MIP-2 (R&D Systems, Catalog # 452-M2)
Ala28-Asn100
Accession # P10889

Formulation  Lyophilized from a 0.2 μm 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.

<table>
<thead>
<tr>
<th>Application</th>
<th>Recommended Concentration</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Blot</td>
<td>0.1 μg/mL</td>
<td>Recombinant Mouse CXCL2/GROβ/MIP-2/CINC-3 (Catalog # 452-M2)</td>
</tr>
<tr>
<td>Immunocytochemistry</td>
<td>5-15 μg/mL</td>
<td>See Below</td>
</tr>
<tr>
<td>Immunohistochemistry</td>
<td>5-15 μg/mL</td>
<td>See Below</td>
</tr>
<tr>
<td>Mouse CXCL2/MIP-2 Sandwich Immunoassay</td>
<td>2-8 μg/mL</td>
<td>Mouse CXCL2/GROβ/MIP-2/CINC-3 Antibody (Catalog # MAB452)</td>
</tr>
<tr>
<td>ELISA Capture</td>
<td>0.1-0.4 μg/mL</td>
<td>Mouse CXCL2/GROβ/MIP-2/CINC-3 Biotinylated Antibody (Catalog # BAF452)</td>
</tr>
<tr>
<td>Standard</td>
<td></td>
<td>Recombinant Mouse CXCL2/MIP-2 (Catalog # 452-M2)</td>
</tr>
</tbody>
</table>

DATA

Immunocytochemistry

CXCL2/GROβ/MIP-2/CINC-3 in Mouse Spleen
CXCL2/GROβ/MIP-2/CINC-3 was detected in immersion fixed mouse spleen cells using Mouse CXCL2/GROβ/MIP-2/CINC-3 Biotinylated Antibody (Catalog # BAF452) at 10 μg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Streptavidin (red; Catalog # NL996). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Non-adherent Cells.

Immunohistochemistry

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 stained using Mouse CXCL2/GROβ/MIP-2/CINC-3 Biotinylated 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.

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  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.

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.