

## DESCRIPTION

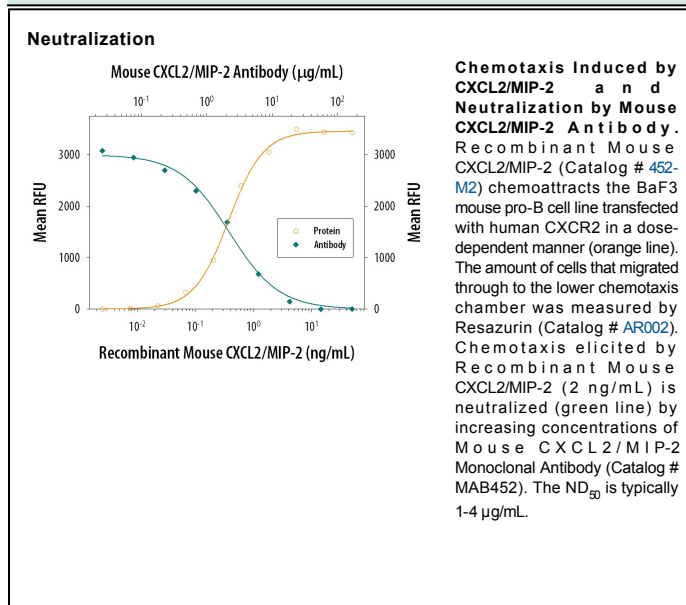
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse CXCL2 in ELISAs and Western blots. In ELISAs, does not cross-react with recombinant human (rh) CXCL2/GROβ, rhCXCL3/GROγ, or recombinant mouse CXCL1/KC.
<b>Source</b>	Monoclonal Rat IgG <sub>2B</sub> Clone # 40605
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant mouse CXCL2/GROβ/MIP-2/CINC-3 Ala28-Asn100 Accession # P10889
<b>Endotoxin Level</b>	<0.10 EU per 1 µg of the antibody by the LAL method.
<b>Formulation</b>	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
<b>Western Blot</b>	1 µg/mL	Recombinant Mouse CXCL2/GROβ/MIP-2/CINC-3 (Catalog # 452-M2) under non-reducing conditions only
<b>Mouse CXCL2/MIP-2 Sandwich Immunoassay</b>		<b>Reagent</b>
<b>ELISA Capture</b>	2-8 µg/mL	Mouse CXCL2/GROβ/MIP-2/CINC-3 Antibody (Catalog # MAB452)
<b>ELISA Detection Standard</b>	0.1-0.4 µg/mL	Mouse CXCL2/GROβ/MIP-2/CINC-3 Biotinylated Antibody (Catalog # BAF452) Recombinant Mouse CXCL2/MIP-2 (Catalog # 452-M2)
<b>Neutralization</b>		Measured by its ability to neutralize CXCL2/GROβ/MIP-2/CINC-3-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human CXCR2. The Neutralization Dose (ND <sub>50</sub> ) is typically 1-4 µg/mL in the presence of 2 ng/mL Recombinant Mouse CXCL2/GROβ/MIP-2/CINC-3.

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

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**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 $\beta$  and GRO $\gamma$ . It has been suggested that mouse KC and MIP-2 are the homologs of the human GROs and rat CINC $\alpha$ s.

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.

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