

## DESCRIPTION

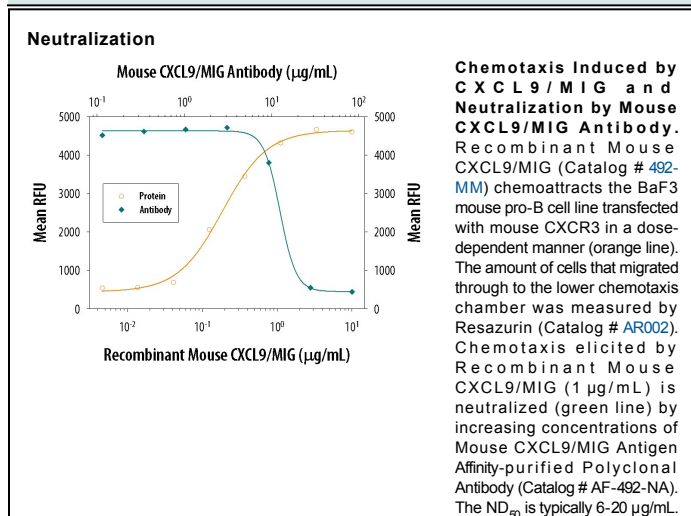
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse CXCL9/MIG in ELISAs and Western blots. In sandwich immunoassays, less than 0.5% cross-reactivity with recombinant human (rh) CXCL9/MIG is observed and less than 0.005% cross-reactivity with recombinant mouse MIP-2, recombinant rat CINC-1, rhGRO $\alpha$ , rhGRO $\beta$ , and rhGRO $\gamma$ is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant mouse CXCL9/MIG (R&D Systems, Catalog # 492-MM) Accession # P18340
<b>Endotoxin Level</b>	<0.10 EU per 1 $\mu$ g of the antibody by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 $\mu$ 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
<b>Western Blot</b>	0.1 $\mu$ g/mL	Recombinant Mouse CXCL9/MIG (Catalog # 492-MM)
<b>Mouse CXCL9/MIG Sandwich Immunoassay</b>		<b>Reagent</b>
<b>ELISA Capture</b>	0.2-0.8 $\mu$ g/mL	Mouse CXCL9/MIG Antibody (Catalog # AF-492-NA)
<b>ELISA Detection</b>	0.1-0.4 $\mu$ g/mL	Mouse CXCL9/MIG Biotinylated Antibody (Catalog # BAF492)
<b>Standard</b>		Recombinant Mouse CXCL9/MIG (Catalog # 492-MM)
<b>Neutralization</b>		Measured by its ability to neutralize CXCL9/MIG-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with mouse CXCR3. The Neutralization Dose (ND <sub>50</sub> ) is typically 6-20 $\mu$ g/mL in the presence of 1 $\mu$ g/mL Recombinant Mouse CXCL9/MIG.

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 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>

### BACKGROUND

CXCL9, also known as MIG, is a member of the  $\alpha$  subfamily of chemokines that lacks the ELR domain, and was initially identified as a lymphokine-activated gene in mouse macrophages. Human CXCL9 was subsequently cloned using mouse CXCL9 cDNA as a probe. The CXCL9 gene is induced in macrophages and in primary glial cells of the central nervous system specifically in response to IFN- $\gamma$ . CXCL9 has been shown to be a chemoattractant for activated T-lymphocytes and TIL but not for neutrophils or monocytes. The mouse CXCL9 cDNA encodes a 126 amino acid residue precursor protein with a 21 amino acid residue signal peptide that is cleaved to yield a 105 amino acid residue mature protein. CXCL9 has an extended carboxy-terminus containing greater than 50% basic amino acid residues and is larger than most other chemokines. The carboxy-terminal residues of CXCL9 are prone to proteolytic cleavage resulting in size heterogeneity of natural and recombinant CXCL9. CXCL9 with large carboxy-terminal deletions have been shown to have diminished activity in the calcium flux assay. A chemokine receptor (CXCR3) specific for CXCL9 and IP-10 has been cloned and shown to be highly expressed in IL-2-activated T-lymphocytes.