

## DESCRIPTION

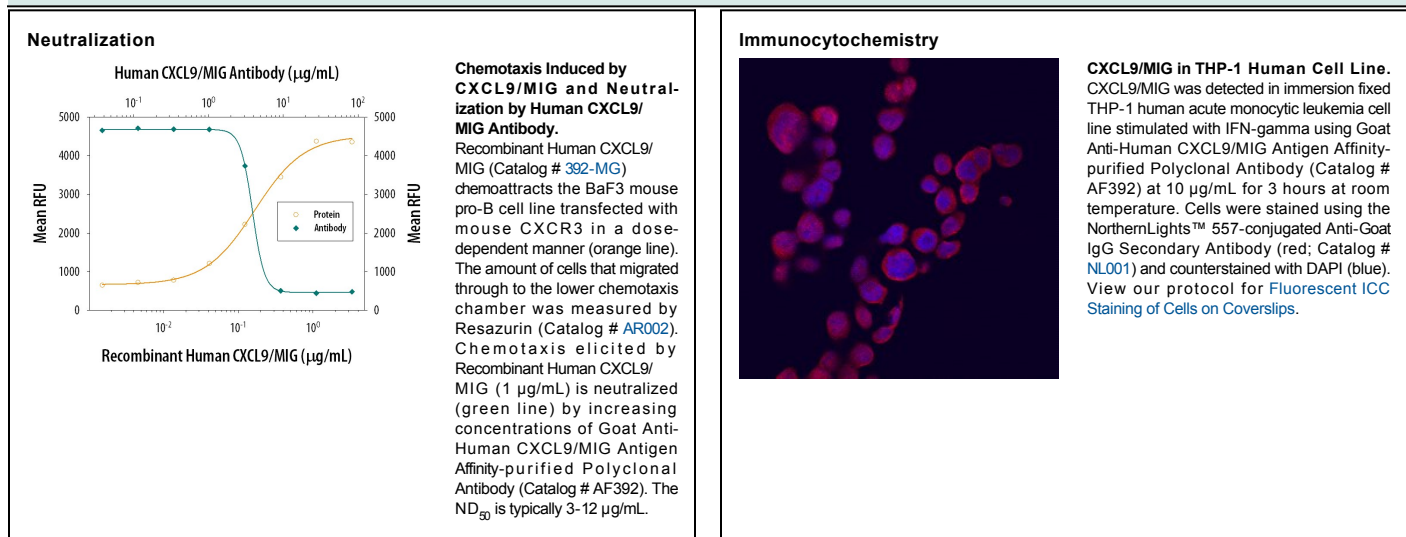
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human CXCL9/MIG in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 10% cross-reactivity with recombinant mouse CXCL9 (non-reducing conditions) is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human CXCL9/MIG Thr23-Thr125 Accession # Q07325
<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>	0.1 µg/mL	Recombinant Human CXCL9/MIG (Catalog # 392-MG)
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below
<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 3-12 µg/mL in the presence of 1 µg/mL Recombinant Human 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, a member of the  $\alpha$  subfamily of chemokines that lack the ELR domain, was initially identified as a lymphokine-activated gene in mouse macrophages. Human CXCL9 was subsequently cloned using mouse MIG 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 human CXCL9 cDNA encodes a 125 amino acid residue precursor protein with a 22 amino acid residue signal peptide that is cleaved to yield a 103 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. The *E. coli*-expressed CXCL9 preparations produced at R&D Systems have been shown to contain greater than 80% full length CXCL9.

## References:

1. Loetscher, M. *et al.* (1996) *J. Exp. Med.* **184**:963.
2. Liao, F. *et al.* (1995) *J. Exp. Med.* **182**:1301.
3. Vanguri, P. (1995) *J. Neuroimmunol.* **56**:35.