

DESCRIPTION

Species Reactivity	Mouse
Specificity	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 α , rhGRO β , and rhGRO γ is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse CXCL9/MIG Accession # P18340
Endotoxin Level	<0.10 EU per 1 μ g of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m filtered solution in PBS.

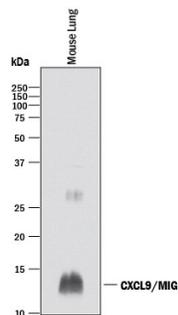
APPLICATIONS

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
Western Blot	0.5 μ g/mL	See Below
Mouse CXCL9/MIG Sandwich Immunoassay		Reagent
ELISA Capture	0.2-0.8 μ g/mL	Mouse CXCL9/MIG Antibody (Catalog # AF-492-NA)
ELISA Detection Standard	0.1-0.4 μ g/mL	Mouse CXCL9/MIG Biotinylated Antibody (Catalog # BAF492) Recombinant Mouse CXCL9/MIG (Catalog # 492-MM)
Neutralization	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 ₅₀) is typically 6-20 μ g/mL in the presence of 1 μ g/mL Recombinant Mouse CXCL9/MIG.	

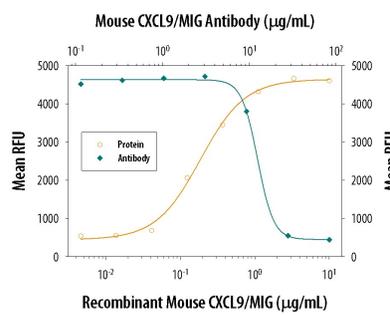
DATA

Western Blot



Detection of Mouse CXCL9/MIG by Western Blot. Western blot shows lysates of mouse lung tissue. PVDF membrane was probed with 0.5 μ g/mL of Goat Anti-Mouse CXCL9/MIG Antigen Affinity-purified Polyclonal Antibody (Catalog # AF-492-NA) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for CXCL9/MIG at approximately 14 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Neutralization



Chemotaxis Induced by CXCL9/MIG and Neutralization by Mouse CXCL9/MIG Antibody. Recombinant Mouse CXCL9/MIG (Catalog # 492-MM) chemoattracts the BaF3 mouse pro-B cell line transfected with mouse CXCR3 in a dose-dependent manner (orange line). The amount of cells that migrated through to the lower chemotaxis chamber was measured by Resazurin (Catalog # AR002). Chemotaxis elicited by Recombinant Mouse CXCL9/MIG (1 μ g/mL) is neutralized (green line) by increasing concentrations of Goat Anti-Mouse CXCL9/MIG Antigen Affinity-purified Polyclonal Antibody (Catalog # AF-492-NA). The ND₅₀ is typically 6-20 μ g/mL.

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. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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

CXCL9, also known as MIG, is a member of the α 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- γ . 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.