Mouse CXCL9/MIG Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF-492-NA

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, rhGROα, rhGROβ, and rhGROγ is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant mouse CXCL9/MIG (R&D Systems, Catalog # 492-MM) Accession # P18340
Endotoxin Level	<0.1 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

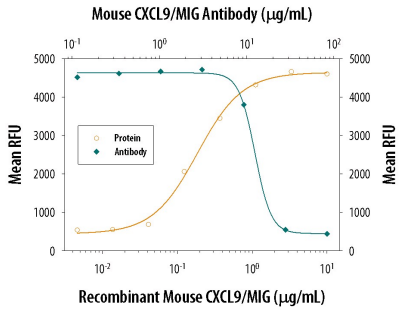
APPLICATIONS

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.*

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Mouse CXCL9/MIG (Catalog # 492-MM)
Mouse CXCL9/MIG Sandwich Immunoassay		**Reagent**
ELISA Capture	0.2-0.8 µg/mL	Mouse CXCL9/MIG Antibody (Catalog # AF-492-NA)
ELISA Detection	0.1-0.4 µg/mL	Mouse CXCL9/MIG Biotinylated Antibody (Catalog # BAF492)
Standard		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 µg/mL in the presence of 1 µg/mL Recombinant Mouse CXCL9/MIG.	

DATA

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 µg/mL) is neutralized (green line) by increasing concentrations of Mouse CXCL9/MIG Antigen Affinity-purified Polyclonal Antibody (Catalog # AF-492-NA). The ND_{50} is typically 6-20 µg/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.
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 from date of receipt, 2 to 8 °C, reconstituted. ● 6 months from date of receipt, -20 to -70 °C, reconstituted.

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.