

DESCRIPTION

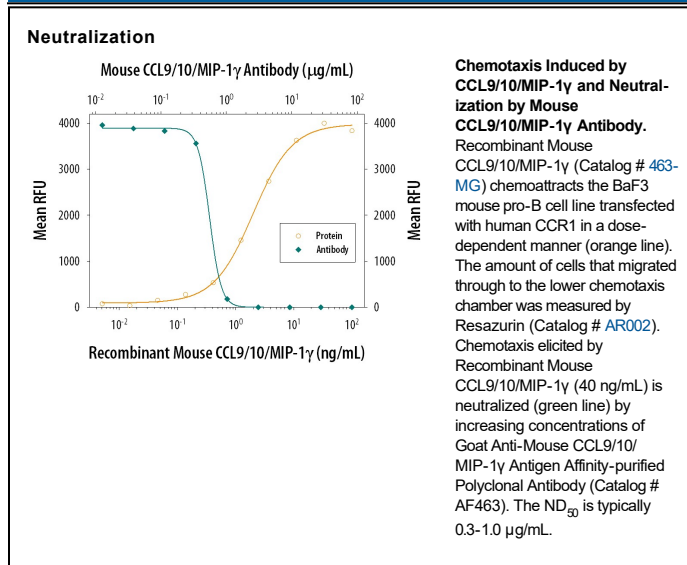
Species Reactivity	Mouse
Specificity	Detects CCL9/10/MIP-1 γ in direct ELISAs and Western blots. In direct ELISAs, less than 25% cross-reactivity with recombinant mouse C10 is observed and less than 1% cross-reactivity with recombinant human MPIF-1 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse CCL9/10/MIP-1 γ Gln22-Gln122 Accession # Q3U9T8
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 either lyophilized or 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	0.1 μ g/mL	Recombinant Mouse CCL9/10/MIP-1 γ (Catalog # 463-MG)
Neutralization		Measured by its ability to neutralize CCL9/10/MIP-1 γ -induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human CCR1. The Neutralization Dose (ND ₅₀) is typically 0.3-1.0 μ g/mL in the presence of 40 ng/mL Recombinant Mouse CCL9/10/MIP-1 γ .

DATA



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

Mouse CCL9/10 (also named MIP-1 γ and MRP-2) is an 11 kDa, secreted, monomeric polypeptide that belongs to the β (or CC) intercrine family of chemokines (1-3). Based on its activity and amino acid (aa) sequence, it is further classified as a member of the NC6 or six cysteine-containing CC subfamily of chemokines (2, 4, 5). This subfamily contains four N-terminally extended chemokines, two human (CCL15 and CCL23) and two mouse (CCL9 and CCL10). Within this subfamily, there are no human-to-rodent interspecies orthologs. Mouse CCL9/10 is synthesized as a 122 aa precursor that contains a 21 aa signal sequence and a 101 aa mature region with six cysteines. As noted, the mature region has an expanded N-terminus relative to other CC family members, and it forms a third intrachain disulfide bond with its two extra cysteines (3-7). Mouse CCL9/10 is 75% aa identical to rat CCL9/10 (8). Chemokines are known to undergo proteolytic processing to generate multiple isoforms. NC6 chemokines are usually only marginally active at full length, but are converted to highly active forms upon N-terminal truncation. Mature CCL9, in the presence of inflammatory fluids, is naturally truncated by 28, 29 or 30 aa at the N-terminus, generating a highly active, 8 kDa, 71-73 aa CCR1 ligand. In contrast, other CCR1 ligands, CCL3/MIP-1 α and CCL5/RANTES, lose their potency when proteolytically processed. CCL9/10 is constitutively secreted, and circulates as a full-length molecule. Any onset of inflammation with subsequent enzyme release may act on local NC6 chemokines, generating early, potent leukocyte chemoattractants (5, 7).

References:

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2. Zlotnik, A. *et al.* (1999) *Crit. Rev. Immunol.* **19**:1
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4. Haelens, A. *et al.* (1996) *Immunobiology* **195**:499.
5. Berahovich, R.D. *et al.* (2005) *J. Immunol.* **174**:7341.
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