

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse MIP-1 α in ELISAs and Western blots. In sandwich immunoassays, less than 0.05% cross-reactivity with rhCCL3, rmCCL9/10 and rmCCL4 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse CCL3/MIP-1 α (R&D Systems, Catalog # 450-MA) Ala24-Ala92 Accession # Q5QNW0
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with BSA as a carrier protein. 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 μ g/mL	Recombinant Mouse CCL3/MIP-1 α (Catalog # 450-MA)
Mouse CCL3/MIP-1α Sandwich Immunoassay		Reagent
ELISA Capture	0.2-0.8 μ g/mL	Mouse CCL3/MIP-1 α Antibody (Catalog # AF-450-NA)
ELISA Detection	0.1-0.4 μ g/mL	Mouse CCL3/MIP-1 α Biotinylated Antibody (Catalog # BAF450)
Standard		Recombinant Mouse CCL3/MIP-1 α (Catalog # 450-MA)

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	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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

The macrophage inflammatory proteins 1 α and 1 β , two closely related but distinct proteins, were originally co-purified from medium conditioned by a LPS-stimulated murine macrophage cell line. Mature mouse MIP-1 α shares approximately 77% and 70% amino acid identity with human MIP-1 α and mouse MIP-1 β , respectively. MIP-1 proteins are expressed primarily in T cells, B cells, and monocytes after antigen or mitogen stimulation. The MIP-1 proteins are members of the β (C-C) subfamily of chemokines.

Both MIP-1 α and MIP-1 β are monocyte chemoattractants *in vitro*. Additionally, the MIP-1 proteins have been reported to have chemoattractant and adhesive effects on lymphocytes, with MIP-1 α and MIP-1 β preferentially attracting CD8⁺ and CD4⁺ T cells, respectively. MIP-1 α has also been shown to attract B cells as well as eosinophils. MIP-1 proteins have been reported to have multiple effects on hematopoietic precursor cells and MIP-1 α has been identified as a stem cell inhibitory factor that can inhibit the proliferation of hematopoietic stem cells *in vitro* as well as *in vivo*. In the same assays, MIP-1 β was reported to be much less active. The functional receptor for MIP-1 α has been identified as CCR1 and CCR5.

References:

1. Menten, P. *et al.* (2002) Cytokine Growth Factor Rev. **13**:455.