

## Human CCL3/MIP-1α Antibody

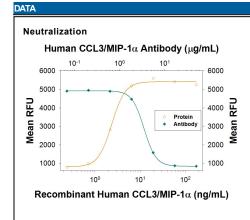
Polyclonal Goat IgG Catalog Number: AB-270-NA

DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects human CCL3/MIP-1α in direct ELISAs and Western blots. In direct ELISAs, less than 20% cross-reactivity with recombinant human (rh) MIP-1β is observed, less than 15% cross-reactivity with recombinant mouse MIP-1α is observed and less than 1% cross-reactivity with rhMIP-1δ and rhMPIF-1 is observed.		
Source	Polyclonal Goat IgG		
Purification	Protein A or G purified		
Immunogen	E. coli-derived recombinant human CCL3/MIP-1α Ala27-Ala92 Accession # P10147		
Endotoxin Level	<0.10 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	1 μg/mL	Recombinant Human CCL3/MIP-1α isoform LD78a (Catalog # 270-LD)
Neutralization	,	y to neutralize CCL3/MIP-1α-induced chemotaxis in the BaF3 mouse pro-B cell line an CCR5. The Neutralization Dose (ND <sub>50</sub> ) is typically ≤6 μg/mL in the presence of 5 ng/mL
	Recombinant Human	CCL3/MIP-1α isoform LD78a.



Chemotaxis Induced by CCL3/MIP-1α and Neutralization by Human CCL3/MIP-1α Antibody. Recombinant Human CCL3/MIP-1α (Catalog # 270-LD) chemoattracts the BaF3 mouse pro-B cell line transfected with human CCR5 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 HumanCCL3/MIP-1α (5 ng/mL) is neutralized (green line) by increasing concentrations of Goat Anti-Human CCL3/MIP-1α Polyclonal Antibody (Catalog # AB-270-NA). The ND<sub>50</sub> is typically ≤6 µg/mL.

PREPARATION AND STORAGE			
Reconstitution	Reconstitute at 1 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.		
	<ul> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> </ul>		
	<ul> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> </ul>		
	<ul> <li>6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>		

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#### BACKGROUND

The macrophage inflammatory proteins -1 $\alpha$  and -1 $\beta$  were originally co-purified from medium conditioned by an LPS-stimulated murine macrophage cell line. Human MIP-1 $\alpha$  refers to the products of several independently cloned cDNAs, including LD78, pL78, pAT464, and GOS19. These cDNAs all code for the same human protein that is a homologue of the murine MIP-1 $\alpha$ . Mature MIP-1 $\alpha$  and MIP-1 $\beta$  in both human and mouse share approximately 70% homology at the amino acid level. The MIP-1 proteins are members of the  $\beta$  (C-C) subfamily of chemokines.

Both MIP-1α and MIP-1α are monocyte chemoattractants *in vitro*. Additionally, the MIP-1 proteins have been reported to have chemoattractant and adhesive effects on lymphocytes, with MIP-1α and MIP-1β preferentially attracting CD8<sup>+</sup> and CD4<sup>+</sup> T cells, respectively. MIP-1α 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-1α 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*. The functional receptor for MIP-1α has been identified as CCR1 and CCR5.

### References:

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

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