

DESCRIPTION

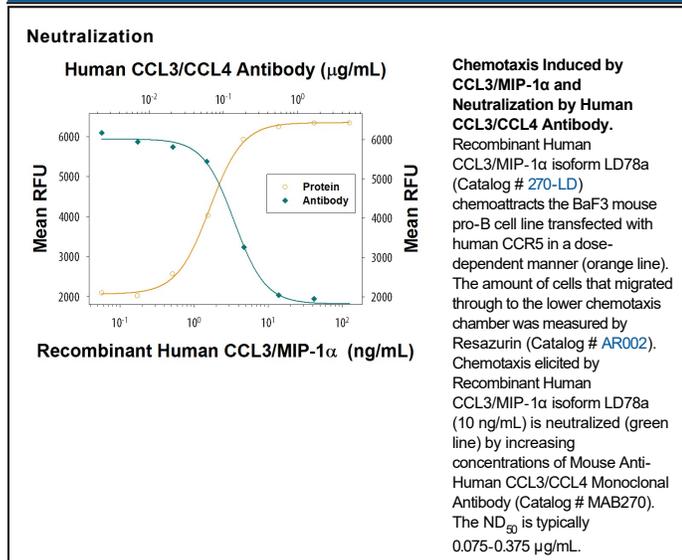
Species Reactivity	Human
Specificity	Detects human CCL3/MIP-1 α in direct ELISAs and Western blots. In direct ELISAs, greater than 75% cross-reactivity with recombinant human (rh) CCL4/MIP-1 β is observed while approximately 30% cross-reactivity with recombinant mouse (rm) CCL3, rmCCL4/MIP-1 β , and rhCCL14 is observed. No cross-reactivity with rhCCL1, 2, 5, 7, 8, 11, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, rmCCL1, 2, 5, 6, 7, 9/10/MIP-1 γ , 11, 12, 17, 19, 20, 21, 22, 24, 25, or recombinant rat CCL20 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 93321
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human CCL3/MIP-1 α Ala27-Ala92 Accession # P10147
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	1 μ g/mL	Recombinant Human CCL3/MIP-1 α isoform LD78a (Catalog # 270-LD) under non-reducing conditions only
Immunocytochemistry	8-25 μ g/mL	Immersion fixed human peripheral blood mononuclear cells treated with PHA
Neutralization		Measured by its ability to neutralize CCL3/MIP-1 α -induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human CCR5. The Neutralization Dose (ND ₅₀) is typically 0.075-0.375 μ g/mL in the presence of 10 ng/mL Recombinant Human CCL3/MIP-1 α isoform LD78a.

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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

The macrophage inflammatory proteins -1 α and -1 β were originally co-purified from medium conditioned by an LPS-stimulated murine macrophage cell line. Human MIP-1 α 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 α . Mature MIP-1 α and MIP-1 β in both human and mouse share approximately 70% homology at the amino acid level. 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. 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.