**DESCRIPTION**

Species Reactivity | Human
---|---
Specificity | Detects human CCL3/MIP-1α in ELISAs and Western blots. In sandwich immunoassays, less than 0.05% cross-reactivity with recombinant human (rh) MIP-1β, rhMIP-18, rhMIP-3α, rhMIP-3β, and recombinant mouse MIP-1α is observed.
Source | Polyclonal Goat IgG
Purification | Antigen Affinity-purified
Immunogen | *Escherichia coli*-derived recombinant human CCL3/MIP-1α
Accession | P10147
Formulation | Lyophilized from a 0.2 µm 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.

| Western Blot | Recommended Concentration | 0.1 µg/mL | Sample | Recombinant Human CCL3/MIP-1α isoform LD78a (Catalog # 270-LD)
---|---|---|---|---
**Immunocytochemistry** | 5-15 µg/mL | See Below |
**Human CCL3/MIP-1α Sandwich Immunoassay** | ELISA Capture | 0.2-0.5 µg/mL | Reagent | Human CCL3/MIP-1α Antibody (Catalog # AF-270-NA)
ELISA Detection | 0.1-0.4 µg/mL | Human CCL3/MIP-1α Biotinylated Antibody (Catalog # BAF270)
Standard | Recombinant Human CCL3/MIP-1α Isoform LD78a (Catalog # 270-LD)

**DATA**

**Immunocytochemistry**

CCL3/MIP-1α was detected in immunofluorescence fixed human peripheral blood mononuclear cells (PBMCs) stimulated with PHA and monensin using Human CCL3/MIP-1α Biotinylated Antigen Affinity-purified Polyclonal Antibody (Catalog # BAF270) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Streptavidin (yellow; Catalog # NL557) and counterstained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Non-adherent Cells.

**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, 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 -1α and -1β were originally co-purified from medium conditioned by an LPS-stimulated murine macrophage cell line. Human MIP-1α 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-1α. Mature MIP-1α and MIP-1β 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-1α and MIP-1β are monocyte chemoattractants in vitro. Additionally, the MIP-1 proteins have been reported to have chemotactic and adhesive effects on lymphocytes, with MIP-1α and MIP-1β preferentially attracting CD8+ and CD4+ 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:**


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