Mouse CCL3/MIP-1α Antibody

Monoclonal Rat IgG2A Clone # 39624
Catalog Number: MAB450

DESCRIPTION
Species Reactivity
Mouse

Specificity
Detects mouse CCL3/MIP-1α in Western blots. In Western blots, approximately 25% cross-reactivity with recombinant mouse CCL4/MIP-1β is observed and no cross-reactivity with recombinant human CCL1, 2, 3, 5, 7, 8, 11, 13, 14, 15, 16, 17, 18, 21, 22, 23, 24, 25, 28, recombinant mouse CCL1, 2, 6, 7, 9/10/MIP-1γ, 11, 12, 19, 21, 22, 25, 28, recombinant rat CCL2 or CCL20 is observed.

Source
Monoclonal Rat IgG2A Clone # 39624

Purification
Protein A or G purified from hybridoma culture supernatant

Immunogen
E. coli-derived recombinant mouse CCL3/MIP-1α
Accession # P10855

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 Mouse CCL3/MIP-1α Isoform LD78a (Catalog # 450-MA) under non-reducing conditions only

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.
- 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, two closely related but distinct proteins, were originally co-purified from medium conditioned by a LPS-stimulated murine macrophage cell line. Mature mouse CCL3/MIP-1α shares approximately 77% and 70% amino acid identity with human CCL3/MIP-1α and mouse CCL4/MIP-1β, 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 CCL3 and CCL4 are monocyte chemoattractants in vitro. Additionally, the MIP-1 proteins have been reported to have chemoattractant and adhesive effects on lymphocytes, with CCL3 and CCL4 preferentially attracting CD8+ and CD4+ T cells, respectively. CCL3 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 CCL3 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, CCL4 was reported to be much less active. The functional receptor for CCL3 has been identified as CCR1 and CCR5.

References: