

Anti-Mouse MIP-3α (RAT) Monoclonal Antibody

MIP-3 alpha Antibody Catalog # ASR5031

Specification

Anti-Mouse MIP-3a (RAT) Monoclonal Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Rat Unconjugated Mouse Mouse Monoclonal WB, I, LCI MIP-3α antibody has been tested for use in western blot and suitable for ELISA, IP, and Neutralization. Specific conditions for reactivity should be optimized by the end user.
Physical State Buffer	Liquid (sterile filtered) 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen Preservative	Anti-MIP-3α (RAT) Monoclonal Antibody was produced in rat by repeated immunizations with mature full length recombinant mouse MIP-3α produced in E.coli followed by hybridoma development. 0.01% (w/v) Sodium Azide
FIESEIVALIVE	0.01% (W/V) Soulum Azide

Anti-Mouse MIP-3a (RAT) Monoclonal Antibody - Additional Information

Gene ID 20297

Other Names 20297

Purity

This product was purified from concentrated tissue culture supernate by Protein G chromatography followed by extensive dialysis against the buffer stated above. This antibody is specific for mouse MIP-3 α protein. A BLAST analysis was used to suggest cross-reactivity with MIP-3 α from mouse sources based on 100% homology with the immunizing sequence. Cross-reactivity with MIP-3 α from other sources has not been determined.

Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.



Anti-Mouse MIP-3α (RAT) Monoclonal Antibody - Protein Information

Name Ccl20

Synonyms Larc, Scya20

Function

Acts as a ligand for C-C chemokine receptor CCR6. Signals through binding and activation of CCR6 and induces a strong chemotactic response and mobilization of intracellular calcium ions (PubMed:20068036, PubMed:9862452). The ligand-receptor pair CCL20-CCR6 is responsible for the chemotaxis of dendritic cells (DC), effector/memory T-cells and B-cells and plays an important role at skin and mucosal surfaces under homeostatic and inflammatory conditions, as well as in pathology, including cancer and autoimmune diseases (PubMed:21376174). CCL20 acts as a chemotactic factor that attracts lymphocytes and, slightly, neutrophils, but not monocytes (By similarity). Involved in the recruitment of both the pro-inflammatory IL17 producing helper T-cells (Th17) and the regulatory T-cells (Treg) to sites of inflammation (PubMed:19050256). Required for optimal migration of thymic natural regulatory T cells (nTregs) and DN1 early thymocyte progenitor cells (PubMed:24638065). Positively regulates sperm motility and chemotaxis via its binding to CCR6 which triggers Ca2+ mobilization in the sperm which is important for its motility (PubMed:25122636). May be involved in formation and function of the mucosal lymphoid tissues by attracting lymphocytes and dendritic cells towards epithelial cells (PubMed: 10064080).

Cellular Location

Secreted {ECO:0000250|UniProtKB:P78556}.

Tissue Location

Thymic medulla (at protein level). Prominently expressed in the small intestine, colon and appendix. Also found in thymus, spleen, lymph node and lung. The long form might be dominant in intestinal, and the short form in lymphoid tissues. Expressed by IL17 producing helper T-cells (Th17).

Anti-Mouse MIP-3α (RAT) Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Mouse MIP-3α (RAT) Monoclonal Antibody - Images



Western Blot of Mouse MIP 3 α (RAT) antibody. Lane 1: mouse recombinant MIP-3a. Lane 2: human recombinant MIP-3a. Primary antibody: MIP 3 α antibody at 0.1 ug/ml for overnight at 4°C. Secondary antibody: IRDye800TM goat anti-rat at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C.

Anti-Mouse MIP-3α (RAT) Monoclonal Antibody - Background

MIP-3 α (also known as C-C motif chemokine 20, small-inducible cytokine A20, macrophage inflammatory protein 3 alpha, MIP-3-alpha, liver and activation-regulated chemokine, CC chemokine LARC and beta chemokine exodus-1) is a chemotactic factor that attracts lymphocytes and, slightly, neutrophils, but not monocytes. MIP-3 α inhibits proliferation of myeloid progenitors in colony formation assays and may be involved in formation and function of the mucosal lymphoid tissues by attracting lymphocytes and dendritic cells towards epithelial cells. C-terminal processed forms have been shown to be equally chemotactically active for leukocytes. MIP-3 α also possesses antibacterial activity against E.coli and S.aureus. MIP-3 α is a secreted protein that is expressed predominantly in the liver, lymph nodes, appendix, peripheral blood lymphocytes, and fetal lung. Low levels of expression are also seen in thymus, prostate, testis, small intestine and colon. C-terminal processed forms which lack 1, 3 or 6 amino acids are produced by proteolytic cleavage after secretion from peripheral blood monocytes.