

# Anti-Human MIP-3α (MOUSE) Monoclonal Antibody

MIP-3 alpha Antibody Catalog # ASR4889

#### **Specification**

## Anti-Human MIP-3α (MOUSE) Monoclonal Antibody - Product Information

Host Mouse

Conjugate Unconjugated

Target Species
Reactivity
Human
Clonality
Application

Human
Monoclonal
WB, I, LCI

Application Note Anti-Human MIP-3α antibody has been

tested by western blot and is suitable for use in ELISA, IP, and Neutralization.

Specific conditions for reactivity should be

optimized by the end user. Liquid (sterile filtered)

Physical State

Liquid (sterile filtered)

Buffer

0.02 M Potassium Phosphate, 0.15 M

Sodium Chloride, pH 7.2

Immunogen Anti-MIP-3α (MOUSE) Monoclonal Antibody

was produced in mouse by repeated immunizations with mature full length recombinant human MIP-3α produced in E.coli followed by hybridoma development.

Preservative 0.01% (w/v) Sodium Azide

## Anti-Human MIP-3α (MOUSE) Monoclonal Antibody - Additional Information

**Gene ID 6364** 

**Other Names** 

6364

#### **Purity**

Anti-MIP-3 $\alpha$  was purified from clarified mouse ascetic fluid by Protein A chromatography followed by extensive dialysis against the buffer stated above. This antibody is specific for human MIP-3 $\alpha$  protein. A BLAST analysis was used to suggest cross-reactivity with MIP-3 $\alpha$  from human sources based on 100% homology with the immunizing sequence. Cross-reactivity with MIP-3 $\alpha$  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-Human MIP-3α (MOUSE) Monoclonal Antibody - Protein Information

Name CCL20

Synonyms LARC, MIP3A, 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:<a href="http://www.uniprot.org/citations/11035086" target=" blank">11035086</a>, PubMed:<a href="http://www.uniprot.org/citations/11352563" target="\_blank">11352563</a>, PubMed:<a href="http://www.uniprot.org/citations/20068036" target="blank">20068036</a>). 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 various autoimmune diseases (PubMed:<a href="http://www.uniprot.org/citations/21376174" target=" blank">21376174</a>). CCL20 acts as a chemotactic factor that attracts lymphocytes and, slightly, neutrophils, but not monocytes (PubMed:<a href="http://www.uniprot.org/citations/11352563" target=" blank">11352563</a>, PubMed:<a href="http://www.uniprot.org/citations/9038201" target=" blank">9038201</a>). 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. Required for optimal migration of thymic natural regulatory T cells (nTregs) and DN1 early thymocyte progenitor cells (By similarity). C- terminal processed forms have been shown to be equally chemotactically active for leukocytes (PubMed: <a href="http://www.uniprot.org/citations/11035086" target=" blank">11035086</a>). 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: <a href="http://www.uniprot.org/citations/23765988" target=" blank">23765988</a>, PubMed:<a href="http://www.uniprot.org/citations/25122636" target=" blank">25122636</a>). Inhibits proliferation of myeloid progenitors in colony formation assays (PubMed:<a href="http://www.uniprot.org/citations/9129037" target=" blank">9129037</a>). May be involved in formation and function of the mucosal lymphoid tissues by attracting lymphocytes and dendritic cells towards epithelial cells (By similarity). Possesses antibacterial activity towards E.coli ATCC 25922 and S.aureus ATCC 29213 (PubMed: <a

**Cellular Location** 

Secreted.

#### **Tissue Location**

Expressed in the seminal plasma, endometrial fluid and follicular fluid (at protein level). Expressed predominantly in the liver, lymph nodes, appendix, peripheral blood lymphocytes, and fetal lung. Low levels seen in thymus, prostate, testis, small intestine and colon.

### Anti-Human MIP-3α (MOUSE) Monoclonal Antibody - Protocols

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

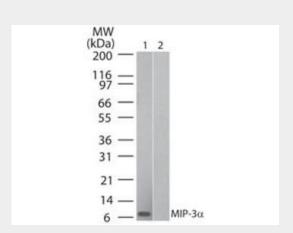
href="http://www.uniprot.org/citations/12149255" target="\_blank">12149255</a>).

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence



- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### Anti-Human MIP-3α (MOUSE) Monoclonal Antibody - Images



Western Blot of Human MIP  $3\alpha$  (Mouse) Antibody. Lane 1: human recombinant MIP-3a. Lane 2: mouse recombinant MIP-3a. Primary antibody: Human MIP  $3\alpha$  antibody at 0.5 ug/ml for overnight at 4°C. Secondary antibody: IRDye $800^{\,\text{\tiny M}}$  goat anti-mouse at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C.

#### Anti-Human MIP-3α (MOUSE) Monoclonal Antibody - Background

MIP-3 $\alpha$  (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 $\alpha$  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 $\alpha$  also possesses antibacterial activity against E.coli and S.aureus. MIP-3 $\alpha$  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.