

**Anti-Mouse MIP-3 $\alpha$  (RAT) Biotin Conjugated Monoclonal Antibody**  
**Anti-Mouse MIP-3 alpha (RAT) Biotin Conjugated Antibody**  
**Catalog # ASR5035****Specification****Anti-Mouse MIP-3 $\alpha$  (RAT) Biotin Conjugated Monoclonal Antibody - Product Information**

Host	Rat
Conjugate	Biotin
FP Value	10-20
Target Species	Mouse
Reactivity	Mouse
Clonality	Monoclonal
Application	WB, I, LCI
Application Note	This purified antibody has been tested for use in ELISA, IP, western blot, and Neutralization. Specific conditions for reactivity should be optimized by the end user.
Physical State	Lyophilized
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	Anti-MIP-3 $\alpha$ (RAT) Monoclonal Antibody was produced in rat by repeated immunizations with mature full length recombinant mouse MIP-3 $\alpha$ produced in E.coli followed by hybridoma development.
Reconstitution Volume	100 $\mu$ L
Reconstitution Buffer	Restore with deionized water (or equivalent)
Stabilizer	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Preservative	0.01% (w/v) Sodium Azide

**Anti-Mouse MIP-3 $\alpha$  (RAT) Biotin Conjugated 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 $\alpha$  protein. A BLAST analysis was used to suggest cross-reactivity with MIP-3 $\alpha$  from mouse 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 4° C prior to restoration. Restore with 0.1 mL of deionized water (or equivalent). For

extended storage aliquot contents and freeze at -20° C or below. 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-3 $\alpha$ (RAT) Biotin Conjugated 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: <a href="http://www.uniprot.org/citations/20068036" target="\_blank">20068036</a>, PubMed: <a href="http://www.uniprot.org/citations/9862452" target="\_blank">9862452</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 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 (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: <a href="http://www.uniprot.org/citations/19050256" target="\_blank">19050256</a>). Required for optimal migration of thymic natural regulatory T cells (nTregs) and DN1 early thymocyte progenitor cells (PubMed: <a href="http://www.uniprot.org/citations/24638065" target="\_blank">24638065</a>). Positively regulates sperm motility and chemotaxis via its binding to CCR6 which triggers Ca<sup>2+</sup> mobilization in the sperm which is important for its motility (PubMed: <a href="http://www.uniprot.org/citations/25122636" target="\_blank">25122636</a>). May be involved in formation and function of the mucosal lymphoid tissues by attracting lymphocytes and dendritic cells towards epithelial cells (PubMed: <a href="http://www.uniprot.org/citations/10064080" target="\_blank">10064080</a>).

#### **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).

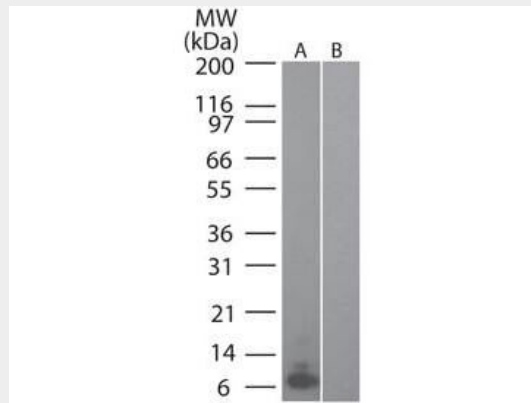
### **Anti-Mouse MIP-3 $\alpha$ (RAT) Biotin Conjugated Monoclonal Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-Mouse MIP-3 $\alpha$ (RAT) Biotin Conjugated Monoclonal Antibody - Images



Western Blot of Mouse MIP 3 $\alpha$  (RAT) antibody Lane 1: mouse recombinant MIP-3 $\alpha$  Lane 2: human recombinant MIP-3 $\alpha$  Primary antibody: MIP 3 $\alpha$  antibody at 0.1  $\mu$ g/ml for overnight at 4°C Secondary antibody: IRDye800™ goat anti-rat at 1:10,000 for 45 min at RT Block: 5% BLOTTO overnight at 4°C

### Anti-Mouse MIP-3 $\alpha$ (RAT) Biotin Conjugated 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.