# MIG (H-40): sc-50302



The Power to Question

## **BACKGROUND**

MIG (monokine induced by interferon- $\gamma$ ), also designated chemokine (C-X-C motif) ligand 9 (CXCL9), CMK, Humig, SCYB9 or crg-10, is a secreted C-X-C chemokine ligand involved in T cell trafficking; it can inhibit angiogenesis and displays thymus-dependent antitumor effects. Human carcinoma line HSC-2 expresses MIG mRNA in response to IFN- $\gamma$ , whereas Ca9-22 and the glioma line A172 do not appear to express MIG mRNA. Elevation of serum MIG and CXCL10 in ocular sarcoidosis correlates with ocular disease activity and ACE (angiotensin converting enzyme) levels. The  $G_{\alpha i}$  protein-coupled receptor CXCR3 can bind MIG released from intestinal epithelium. MIG can block platelet activating factor (PAF)- or leukotriene B4 (LTB4)-induced responses and can inhibit eotaxin-induced filamentous Actin (F-Actin) formation and chemoattraction. MIG is one of many chemokines that belong to a group of small, mostly basic, structurally related molecules that regulate cell trafficking of various types of leukocytes through interactions with a subset of seven transmembrane, G protein-coupled receptors.

## **REFERENCES**

- Lee, H.H. and Farber J.M. 1996. Localization of the gene for the human MIG cytokine on chromosome 4q21 adjacent to INP10 reveals a chemokine "mini-cluster". Cytogenet. Cell Genet. 74: 255-258.
- 2. O'Donovan, N., et al. 1999. Physical mapping of the C-X-C chemokine locus on human chromosome 4. Cytogenet. Cell Genet. 84: 39-42.
- 3. Albanesi, C., et al. 2000. IL-4 enhances keratinocyte expression of CXCR3 agonistic chemokines. J. Immunol. 165: 1395-1402.

## **CHROMOSOMAL LOCATION**

Genetic locus: CXCL9 (human) mapping to 4q21.1; Cxcl9 (mouse) mapping to 5 E2.

## **SOURCE**

MIG (H-40) is a rabbit polyclonal antibody raised against amino acids 28-67 mapping near the N-terminus of MIG of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

# **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

#### **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

#### **APPLICATIONS**

MIG (H-40) is recommended for detection of MIG of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

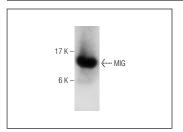
Suitable for use as control antibody for MIG siRNA (h): sc-39361, MIG siRNA (m): sc-60027, MIG shRNA Plasmid (h): sc-39361-SH, MIG shRNA Plasmid (m): sc-60027-SH, MIG shRNA (h) Lentiviral Particles: sc-39361-V and MIG shRNA (m) Lentiviral Particles: sc-60027-V.

Molecular Weight of MIG: 8-10 kDa.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

#### **DATA**



MIG (H-40): sc-50302. Western blot analysis of human

## **SELECT PRODUCT CITATIONS**

- Hosomi, S., et al. 2011. Increased numbers of immature plasma cells in peripheral blood specifically overexpress chemokine receptor CXCR3 and CXCR4 in patients with ulcerative colitis. Clin. Exp. Immunol. 163: 215-224.
- 2. Sun, L.F., et al. 2013. Expression of cytokines in mouse hepatitis B virus X gene-transfected model. J. Huazhong Univ. Sci. Technol. Med. Sci. 33: 172-177.



Try MIG (A-9): sc-514138 or MIG (ZZ-6): sc-74227, our highly recommended monoclonal alternatives to MIG (H-40).