

# MIG (N-16): sc-18536

## 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 anti-tumor 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., et al. 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.
- O'Donovan, N., et al. 1999. Physical mapping of the CXC chemokine locus on human chromosome 4. *Cytogenet. Cell Genet.* 84: 39-42.
- Albanesi, C., et al. 2000. IL-4 enhances keratinocyte expression of CXCR3 agonistic chemokines. *J. Immunol.* 165: 1395-1402.
- Loetscher, P., et al. 2001. The ligands of CXC chemokine receptor 3, I-TAC, Mig, and IP10, are natural antagonists for CCR3. *J. Biol. Chem.* 276: 2986-2991.
- Ruehlmann, J.M., et al. 2001. MIG (CXCL9) chemokine gene therapy combines with antibody-cytokine fusion protein to suppress growth and dissemination of murine colon carcinoma. *Cancer Res.* 61: 8498-8503.
- Yun, J.J., et al. 2002. The role of MIG/CXCL9 in cardiac allograft vasculopathy. *Am. J. Pathol.* 161: 1307-1313.
- LocusLink Report (LocusID: 601704). <http://www.ncbi.nlm.nih.gov/LocusLink/>

## CHROMOSOMAL LOCATION

Genetic locus: CXCL9 (human) mapping to 4q21.1.

## SOURCE

MIG (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of MIG of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-18536 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

MIG (N-16) is recommended for detection of MIG of 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).

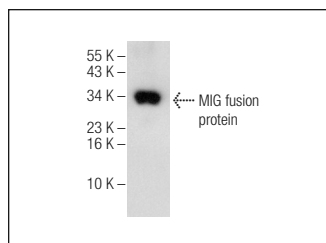
Suitable for use as control antibody for MIG siRNA (h): sc-39361, MIG shRNA Plasmid (h): sc-39361-SH and MIG shRNA (h) Lentiviral Particles: sc-39361-V.

Molecular Weight of MIG: 8-10 kDa.

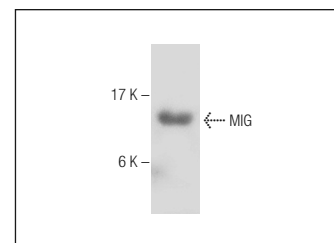
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



MIG (N-16): sc-18536. Western blot analysis of human recombinant MIG fusion protein.



MIG (N-16): sc-18536. Western blot analysis of human recombinant MIG.

## 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.

**MONOS**  
Satisfaction  
Guaranteed

Try **MIG (A-9): sc-514138** or **MIG (ZZ-6): sc-74227**, our highly recommended monoclonal alternatives to MIG (N-16).