

# MIG (CXCL9), human recombinant (rHuMIG)

Catalog No: 94871 Lot No: XXXXX Source: *E. coli* 

Synonyms: Small inducible cytokine B9, CXCL9, Gamma interferon-induced monokine, MIG, chemokine (C-X-C motif)

ligand 9, CMK, Humig, SCYB9, crg-10, monokine induced by gamma-interferon

# **Background**

Chemokine (C-X-C motif) ligand 9 (CXCL9) is a small cytokine belonging to the CXC chemokine family that is also known as Monokine induced by gamma interferon (MIG). CXCL9 is a T-cell chemoattractant, which is induced by IFN-?. It is closely related to two other CXC chemokines called CXCL10 and CXCL11, whose genes are located near the gene for CXCL9 on human chromosome 4. CXCL9, CXCL10 and CXCL11 all elicit their chemotactic functions by interacting with the chemokine receptor CXCR3.

## Description

MIG (monokine induced by gamma-interferon ) human recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 103 amino acids and having a molecular mass of 11700 Dalton. MIG is purified by proprietary chromatographic techniques.

# **Physical Appearance**

Sterile filtered white lyophilized (freeze-dried) powder.

## **Formulation**

Lyophilized from a 0.2 µm filtered concentrated (1.0 mg/ml) solution in 20 mM PB, pH 7.4, 50 mM NaCl.

# Solubility

It is recommended to reconstitute the lyophilized MIG in sterile 18 M $\Omega$ -cm H $_2$ O not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

#### Stability

Lyophilized MIG, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CXCL9 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

#### **Purity**

Greater than 97.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

# **Amino Acid Sequence**

TPVVRKGRCS CISTNQGTIH LQSLKDLKQF APSPSCEKIE IIATLKNGVQ TCLNPDSADV KELIKKWEKQ VSQKKKQKNG KKHQKKKVLK VRKSQRSRQK KTT

# Activity

Determined by its ability to chemoattract human peripheral blood T-Lymphocytes using a concentration range of 10 - 100 ng/ml corresponding to a specific activity of 10,000 - 100,000 IU/mg.





# Usage

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