

## PRODUCT DATA SHEET



Bioworld Technology, Inc.

### Recombinant Human MIG (rHuMIG/CXCL9)

Catalog Number: PR1091

Source: Escherichia coli.

Quantity: 5µg/20µg/1.0mg

#### Description

CXCL9, a member of the  $\alpha$  subfamily of chemokines that lack the ELR domain, was initially identified as a lymphokine-activated gene in mouse macrophages. The CXCL9 gene is induced in macrophages and in primary glial cells of the central nervous system specifically in response to IFN- $\gamma$ . CXCL9 has been shown to be a chemoattractant for activated T-lymphocytes and TIL but not for neutrophils or monocytes. The human CXCL9 cDNA encodes a 125 amino acid residue precursor protein with a 22 amino acid residue signal peptide that is cleaved to yield a 103 amino acid residue mature protein. CXCL9 has an extended carboxy-terminus containing greater than 50% basic amino acid residues and is larger than most other chemokines. A chemokine receptor (CXCR3) specific for CXCL9 and IP-10 has recently been cloned and shown to be highly expressed in IL-2-activated T-lymphocytes.

#### Molecular Weight:

11.7 kDa, a single non-glycosylated polypeptide chain containing 103 amino acids.

#### Purity:

>97% by SDS-PAGE and HPLC analyses.

#### Biological Activity:

Fully biologically active when compared to standard. Determined by its ability to chemoattract human peripheral blood T-Lymphocytes using a concentration range of 10.0-100.0 ng/ml, corresponding to a Specific Activity of  $\square 1 \times 10^4$  IU/mg.

#### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

#### Formulation:

Lyophilized from a 0.2mm filtered concentrated solution in 20mM PB, pH 7.4, 50mM NaCl.

#### AA Sequence:

T P V V R K G R C S C I S T N Q G T I H L Q S L K D L K  
Q F A P S P S C E K I E I I A T L K N G V Q T C L N P D  
S A D V K E L I K K W E K Q V S Q K K K Q K N G K K  
H Q K K K V L K V R K S Q R S R Q K K T T

#### Endotoxin:

Less than 1EU/mg of rHuMIG/CXCL9 as determined by LAL method.

#### Reconstitution:

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at  $<-20^{\circ}\text{C}$ . Further dilutions should be made in appropriate buffered solutions.

#### Storage:

This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

#### Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE. Made in China

### Bioworld Technology, Inc.

1660 South Highway 100, Suite 500 St. Louis Park, MN  
55416, USA. Email: [info@bioworld.com](mailto:info@bioworld.com)  
Tel: 6123263284 Fax: 6122933841

### Bioworld technology, co, Ltd.

No 9, weidi road Qixia District Nanjing, 210046, P, R.China.  
Tel: 0086-025-86371664 Email: [info@biogot.com](mailto:info@biogot.com)  
Fax: 0086-025-86213570

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