Technical Data Sheet

Recombinant Human MIG (rHu MIG/CXCL9)

Human MIG/CXCL9

CXCL9, a member of the α 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-γ. 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.

Catalog Number:	RC312-20
Source:	*Escherichia coli.*
Molecular Weight:	11.7 kDa, a single non-glycosylated polypeptide chain containing 103 amino acids.
Quantity:	5ug/20ug/1mg
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.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2μm filtered concentrated (1.0mg/ml) solution in 20mM PB, pH 7.4, 50mM NaCl.
AA Sequence:	TPVVRKGRCSCISTNQGTIHLQSLKDLKQFAPSPSCEKIEIIATLKNGVQTCLN PDSADVKELIKKWEKQVSQKKKQKNGKKHQKKKVLKVRKSQRSRQKKTT
Endotoxin:	Less than 1EU/μg 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°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 Bio Basic Inc. for research, laboratory or further evaluation purposes. **NOT FOR HUMAN USE**.