

**DATASHEET**  
Version 20181206**MIG/CXCL9, Mouse****Cat. No.:** Z03343-25**Size:** 25.0 ug

**Synonyms:** Small inducible cytokine B9, CXCL9, Gamma interferon-induced monokine, MIG, chemokine (C-X-C motif) ligand 9, CMK, Hu-mig, SCYB9, crg-10, M119, monokine induced by gamma-interferon.

**Description:**

Chemokine (C-X-C motif) ligand 9 (CXCL9), also known as monokine induced by interferon gamma (MIG), is a small cytokine belonging to the CXC chemokine family. The CXCL9 gene is induced in macrophages and in primary glial cells of the central nervous system in response to IFN $\gamma$ . CXCL9 has been shown to be a chemoattractant for activated Th1 lymphocytes and tumor-infiltrating leukocytes (TILs) but not for neutrophils or monocytes. CXCL is also involved in other cellular activities including inhibition of tumor growth, angiogenesis, and inhibition of colony formation of hematopoietic progenitors. CXCL9 is closely related to two other CXC chemokines, CXCL10 and CXCL11. CXCL9, CXCL10 and CXCL11 all elicit their chemotactic functions by interacting with the chemokine receptor CXCR3.

Recombinant Mouse MIG/CXCL9 produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 106 amino acids. A fully biologically active molecule, recombinant Mouse MIG/CXCL9 has a molecular mass of 12.3 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

**Amino Acid Sequence:**

00001 MTLVIRNARC SCISTSRGTI HYKSLKDLKQ FAPSPNCNKT  
00041 EIIATLKNGD QTCLDPDSAN VKKLMKEWEK KISQKKKQKR  
00081 GKKHQKNMKN RPKPTQSR RSRKTT

**Source:** *E. coli*

**Biological Activity:** The EC<sub>50</sub> value of Mouse MIG/CXCL9 on Ca<sup>2+</sup> mobilization assay in CHO-K1/G $\alpha$ 15/mCXCR3 cells (human G $\alpha$ 15 and mouse CXCR3 stably expressed in CHO-K1 cells) is less than 2  $\mu$ g/ml.

**Molecular Weight:** 12.3 kDa, observed by reducing SDS-PAGE.

**Formulation:** Lyophilized after extensive dialysis against PBS.

**Reconstitution:** Reconstituted in ddH<sub>2</sub>O or PBS at 100  $\mu$ g/ml.

**Purity:** > 95% as analyzed by SDS-PAGE.

**Endotoxin Level:** < 0.2 EU/ $\mu$ g, determined by LAL method.

**Storage:** Lyophilized recombinant Mouse MIG/CXCL9 remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Mouse MIG/CXCL9 should be stable up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.