

**DATASHEET**  
Version 20181206**MIF, Human****Cat. No.:** Z03159-1**Size:** 1.0 mg**Synonyms:** Macrophage Migration, Inhibitory Factor, GLIF, MMIF, GIF, Glycosylation-inhibiting factor**Description:**

Macrophage Migration Inhibitory Factor (MIF) is a pleiotropic cytokine, existing as a homotrimer *in vivo*. MIF was originally identified as a T cell derived factor responsible for the inhibition of macrophage migration. However, recently MIF has received much more attention because of its possible roles in angiogenesis and cancer development. MIF is over-expressed in various cancers, including pancreatic, breast, colon, brain, prostate, skin, and lung. The intratumoral expression of MIF is strongly correlated with angiogenic growth factor expression, such as the expression of Interleukin 8 (IL-8) and Vascular Endothelial Growth Factor (VEGF), and with risk of recurrence after resection.

Recombinant human Macrophage Migration Inhibitory Factor (rhMIF) produced in *E. coli* is a single non-glycosylated polypeptide chain containing 115 amino acids. rhMIF has a molecular mass of 12.5 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

**Amino Acid Sequence:**

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00001 MPMFIVNTNV PRASVPDGLF SELTQQLAQA TGKPPQYIAV
00041 HVVPDQLMAF GGSSEPCALC SLHSIGKIGG AQNRSYSKLL
00081 CGLLAERLRI SPDRVYINYY DMNAANVGWN NSTFA
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**Source:** *E. coli***Species:** Human**Molecular Weight:** 12.5 kDa, observed by reducing SDS-PAGE.**Formulation:** Lyophilized after extensive dialysis against PBS.**Reconstitution:** Reconstituted in ddH<sub>2</sub>O at 100 µg/mL.**Purity:** > 95% as analyzed by SDS-PAGE and HPLC.**Endotoxin Level:** < 0.2 EU/µg, determined by LAL method.**Storage:** Lyophilized recombinant human Macrophage Migration Inhibitory Factor (rhMIF) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhMIF remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.