

# Macrophage Migration Inhibitory Factor, His Tag, human recombinant (rHuMIF-His-C)

Catalog No: 95053 Lot No: XXXXX Source: *E. coli* 

**Synonyms:** Phenylpyruvate tautomerase, Glycosylation-inhibiting factor, GIF, MMIF, MIF

#### **Background**

The cytokine Macrophage migration inhibitory factor (MIF) has been identified to be secreted by the pituitary gland and the monocyte/macrophage and to play an important role in endotoxic shock. MIF has the unique property of being released from macrophages and T cells in response to physiological concentrations of glucocorticoids. The secretion of MIF is tightly regulated and decreases at high, anti-inflammatory steroid concentration.

## Description

MIF human recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 123 amino acids and having a molecular mass of 13.5 kDa. MIF is fused to a His tag at C-terminus and purified by proprietary chromatographic techniques.

## **Physical Appearance**

Sterile filtered lyophilized powder.

### **Formulation**

Human MIF was lyophilized from a 1 mg/ml solution containing PBS pH 7.4.

#### Solubility

It is recommended to reconstitute the lyophilized MIF 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 MIF, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution MIF 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 95.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

#### **Amino Acid Sequence**

MPMFIVNTNV PRASVPDGFL SELTQQLAQA TGKPPQYIAV HVVPDQLMAF GGSSEPALCS LHSIGKIGGA QNRSYSKLLC GLLAERLRIS PDRVYINYYD MNAANVGWNN STFALEHHHH HH

## Activity

Measured by its ability to bind rhCD74 in a functional ELISA.





## Usage

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