

## Recombinant Human Macrophage Migration Inhibitory Factor active (rh MIF active)

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

**Introduction:** 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:** Rh MIF was cloned into an E.coli expression vector and was purified to apparent homogeneity by using conventional column chromatography techniques. Recombinant Human MIF produced in *E.Coli* is a single, non-glycosylated, polypeptide chain containing 115 amino acids and having a molecular mass of 12.5 kDa.

**Source:** *Escherichia Coli*.

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation:** Lyophilized from 10mM sodium phosphate buffer pH-7.5.  
The aliquots of 1µg and 2µg contain Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized rh MIF in sterile H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized rh MIF although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rh 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 97.0% as determined by RP-HPLC and by SDS-PAGE.

**Amino Acid Sequence:** MPMFIVNTNV PRASVPDGFL SELTQQLAQA TGKPPQYIAV HVVPDQLMAF GGSSEPCALC LHSIGKIGGA QNRSYSKLLC GLLAERLRIS PDRVYINYD MNAANVGWNN STFA.

**Biological Activity:** Human PBMCs were cultured with 0 to 1000 ng/ml human MIF. Production of IL-8 was measured via ELISA after 24 hours. The ED50 which was found to be 88 - 132ng/ml.

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<i>small</i>	2 µg	Cat.N°	11344262
<i>medium</i>	10 µg	Cat.N°	11344263

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