



## Product Datasheet

<b>Product Name</b>	Macrophage Migration Inhibitory Factor Human Recombinant (Active)
<b>Cata No</b>	CB501330
<b>Source</b>	<i>Escherichia Coli.</i>
<b>Synonyms</b>	Phenylpyruvate tautomerase, Glycosylation-inhibiting factor, GIF, MMIF, MIF.

### Description

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. MIF human Recombinant was cloned into an E.coli expression vector and was purified to apparent homogeneity by using conventional column chromatography techniques. Macrophage Inducing Factor Human Recombinant is a single, non-glycosylated, polypeptide chain containing 115 amino acids and having a molecular mass of 12.5 kDa.

### Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

### Biological Activity

Human MIF biological activity was measured in an agarose microdroplet assay using human U937 cells as targets. The optimal range of activity found for human MIF in this assay was 0.5-1ug/ml.

### Purity

Greater than 97.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

### Formulation

MIF-Protein was lyophilized from 10mM sodium phosphate buffer pH-7.5.

### Reconstitution

It is recommended to reconstitute the lyophilized MIF-Protein in sterile 18MΩ-cm H<sub>2</sub>O at a concentration between 0.1mg-1mg per 1ml.

### Stability

Lyophilized MIF-protein although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution MIF-protein 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.**

### Sequence

MPMFIVNTNV PRASVPDGFL SELTQQLAQA  
TGKPPQYIAV HVVPDQLMAF GGSSEPCALC  
LHSIGKIGGA QNRSYSKLLC GLLAERLRIS  
PDRVYINYYD MNAANVGWNN STFA.