



Recombinant Protein Technical Manual

Recombinant Human MIF Protein

RPES4040

Product Data:

Product SKU: RPES4040

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: P14174

Protein Information:

Molecular Mass: 12.5 kDa

AP Molecular Mass: 10—14 kDa

Tag:

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

Formulation: Supplied as a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, 20% Glycerol, pH 7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Macrophage migration inhibitory factor; MIF; MMIF; Glycosylation-inhibiting factor; GLIF; L-dopachrome tautomerase; Phenylpyruvate tautomerase

Immunogen Information:

Sequence: Met 1-Ala115

Background:

Human MIF is a 12.5 kDa, 115 amino acid (aa) nonglycosylated polypeptide that is synthesized without a signal sequence. Secretion occurs nonclassically via an ABCA1 transporter. Pro-inflammatory cytokine. Involved in the innate immune response to bacterial pathogens. The expression of MIF at sites of inflammation suggests a role as mediator in regulating the function of macrophages in host defense. Counteracts the anti-inflammatory activity of glucocorticoids. Has phenylpyruvate tautomerase and dopachrome tautomerase activity (in vitro), but the physiological substrate is not known. It is not clear whether the tautomerase activity has any physiological relevance, and whether it is important for cytokine activity.