

Recombinant Human Macrophage migration inhibitory factor/MIF Protein

Catalog No.: RP02895LQ Recombinant

Sequence Information

Species Gene ID Swiss Prot E.coli 4282 P14174

Tags N-His

Synonyms

GIF; GLIF; MMIF; MIF; GLIF; MMIF

Product Information

Source Purification
E.coli ≥ 95 % as
determined by

determined by SDS-PAGE.

Endotoxin

< 1 EU/ μ g of the protein by LAL method.

Formulation

Supplied as a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, 50% Glycerol, pH7.4.

Reconstitution

Background

MIF (or macrophage migration inhibitory factor) was the first lymphokine/cytokine to be recognized in the pregenomics era (1, 2). Regardless, it is one of the least understood of all inflammatory mediators (1, 3). Human MIF is a 12.5 kDa, 115 amino acid (aa) nonglycosylated polypeptide that is synthesized without a signal sequence (4 - 7). Secretion occurs nonclassically via an ABCA1 transporter (8). The initiating Met is removed, leaving Pro as the first amino acid. The molecule consists of two alpha -helices and six beta -strands, four of which form a beta -sheet. The two remaining beta -strands interact with other MIF molecules, creating a trimer (2, 9, 10). Structure-function studies suggest MIF is bifunctional with segregated topology. The N- and C-termini mediate enzyme activity (in theory). Phenylpyruvate tautomerase activity (enol-to-keto) has been demonstrated and is dependent upon Pro at position #1 (11). Amino acids 50 - 65 have also been suggested to contain thiol-protein oxidoreductase activity (12).

Basic Information

Description

Recombinant human Macrophage migration inhibitory factor/MIF Protein is produced by E.coli expression system. The target protein is expressed with sequence (Met1-Ala115) of human Macrophage migration inhibitory factor/MIF (Accession #NP_002406.1) fused with a 6×His tag at the N-terminus.

Bio-Activity

Storage

Store at -70°C. This product is stable at \leq -70°C for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature. Avoid repeated freeze-thaw cycles. Avoid repeated freeze/thaw cycles.

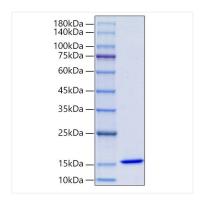
Contact



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^{*} For your safety and health, please wear a lab coat and disposable gloves when handling.

Validation Data



Recombinant Human Macrophage migration inhibitory factor/MIF Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.