Recombinant Mouse Macrophage migration inhibitory factor/MIF Protein



RPCB1105

Product Information

Product SKU: RPCB1105 **Gene ID**: 17319 **Size**: 10μg

Tag: NO-Tag Reactivity: Mouse

Additional Information

Expression Host: E. coli **Swissprot**: P34884

Purity: > 95% by SDS-PAGE.

Protein Information

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).

Protein Description: High quality, high purity and low endotoxin recombinant Recombinant Mouse

Macrophage migration inhibitory factor/MIF Protein , tested reactivity in E. coliand

has been validated in SDS-PAGE.100% guaranteed.

Endotoxin: $< 0.1 \text{ EU/}\mu\text{g}$

Formulation: Lyophilized from a 0.22 μm filtered solution of 50mM Tris 150mM NaCl pH8.0.

Storage:

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.