

Rev03
Update: Dec,14,2021

DATASHEET

MIF, Mouse

Cat. No.: Z03581

Product Introduction

Species	Mouse
Protein Construction	MIF (Met1- Ala115) Accession # P34884
Purity	> 96% as analyzed by SDS-PAGE > 96% as analyzed by HPLC
Endotoxin Level	< 1 EU/ μ g of protein by LAL method
Expression System	E. coli
Theoretical Molecular Weight	12.5 kDa
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS, pH 7.4, 1 mM DTT.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at -20°C or -70°C. Upon reconstitution, the product should be stable for up to 1 week at 2-8°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

Background

Target Background : Macrophage migration inhibitory factor (MIF or MMIF), also named as glycosylation-inhibiting factor (GIF), L-dopachrome isomerase, or phenylpyruvate tautomerase, is a protein encoded by the MIF gene. It is released from white blood cells by bacterial antigen stimulation to trigger an acute immune response, or by glucocorticoids to counter-act the inhibitory effects of glucocorticoids on immune system. MIF is a homotrimer of which each subunit contains 115 amino acids. As mentioned above, MIF is involved in the innate immune response to bacterial pathogens and counter-acts the anti-inflammatory activity of glucocorticoids. Furthermore, it also plays a role as mediator in regulating the function of macrophages in host defense and has phenylpyruvate tautomerase and dopachrome tautomerase activity in vitro. Mouse MIF is active on human cells, while human MIF is active on mouse cells. Mouse MIF is 99 %, 84 %, 90 %, and 90 % a.a. identical to rat, porcine, bovine and human MIF, respectively.

Synonyms : DER6; GIF; L-dopachrome Isomerase; L-dopachrome Tautomerase; Phenylpyruvate Tautomerase

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.