

Mouse MIF / Migration Inhibitory Factor Protein (His Tag)

Catalog Number: 50066-M08H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

GIF, Glif, MGC107654

Protein Construction:

A DNA sequence encoding the mouse MIF (P34884) precursor (Pro 2-Ala 115) was fused with a polyhistidine tag at the C-terminus and a signal peptide at the N-terminus.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 85 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Pro 2

Molecular Mass:

The secreted recombinant mouse MIF consists of 125 amino acids and has a calculated molecular mass of 13.8 kDa. As a result of glycosylation, the apparent molecular mass of the recombinant protein is approximately 18 and 22 kDa in SDS-PAGE under reducing conditions due to different glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

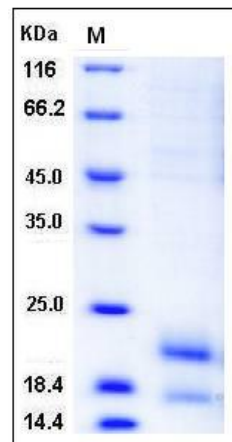
Usage Guide

Storage:

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

Macrophage migration inhibitory factor (MIF), a cytokine originally reported in the 1960s as the prototypic T lymphokine, has emerged in recent years as a key factor regulating inflammatory responses. Both by directly activating immune cells, and by participating in activation entrained by other stimuli, MIF is important in innate and adaptive immune responses as well as tissue-specific mechanisms of damage. MIF was first discovered as a lymphokine involved in delayed hypersensitivity and various macrophage functions, including phagocytosis, spreading, and tumoricidal activity. It has been reported that MIF is associated with the pathogenesis of a variety of diseases. Multiple clinical studies have indicated the utility of MIF as a biomarker for different diseases that have an inflammatory component; these include systemic infections and sepsis, autoimmune diseases, cancer, and metabolic disorders such as type 2 diabetes and obesity. Over the past few years, the significance of the role of MIF in a variety of both solid and hematologic tumors has been established. Both circulating and intracellular MIF protein levels are elevated in cancer patients and MIF expression reportedly correlates with stage, metastatic spread and disease-free survival. More recently, interest has increased in the role of MIF in the development of central nervous system (CNS) tumors, in which it appears to influence cell cycle control

References

1. Hoi AY, et al., 2007, Inflamm Allergy Drug Targets. 6 (3): 183-90.
2. Ohkawara T, et al., 2005, J Gastroenterol. 40 (2): 117-22.
3. Grieb G, et al., 2010, Drug News Perspect. 23 (4): 257-64
4. Bach JP, et al., 2009, Cancer. 115 (10): 2031-40.
5. Rendon BE, et al., 2009, Exp Mol Pathol. 86 (3): 180-5.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

Fax :+86-10-51029969 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>