Human MIF protein, His and GST tag

44 kDa.

Cat. No. GTX00197-pro

Applications	Functional Assay	Package 10 μg
Species	Human	13

Applications

Application Note

Observed MW (kDa)

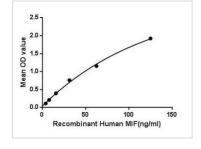
Macrophage migration inhibitory factor (MIF), also known as glycosylation-inhibiting factor (GIF), L-dopachrome isomerase, or phenylpyruvate tautomerase is a protein classified as an inflammatory cytokine. MIF is an important regulator of innate immunity. It involved in cell-mediated immunity, immunoregulation, and inflammation. MIF plays a role in the regulation of macrophage function in host defense through the suppression of antiinflammatory effects of glucocorticoids. This lymphokine and the JAB1 protein form a complex in the cytosol near the peripheral plasma membrane, which may indicate a role in integrin signaling pathways. Besides, Major Histocompatibility Complex Class II Invariant Chain (MHCDG) has been identified as an interactor of MIF, thus a binding ELISA assay was conducted to detect the interaction of recombinant human MIF and recombinant human MHCDG. Briefly, MIF were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to MHCDG-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-MIF pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of MIF and MHCDG was in a dose dependent manner.

Properties		
Form	Lyophilized powder	
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.	
Preservative	ProClin 300	
Storage	For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.	
Region/Sequence	N-terminal His and GST-Tag; Met3~Asn111 (NP_002406.1)	
Expression System	E. coli	
Purity	> 95%	
Endotoxin	< 1 EU/µg	
Conjugation	Unconjugated	
Note	For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.	



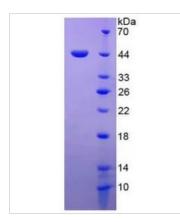
For full product information, images and publications, please visit our <u>website</u>.

DATA IMAGES



GTX00197-pro Functional Assay Image

Functional ELISA analysis of GTX00197-pro Human MIF protein which can bind immobilized MHCDG protein.



GTX00197-pro Image

SDS-PAGE analysis of GTX00197-pro Human MIF protein.



WB analysis of GTX00197-pro Human MIF protein.



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