

Purified anti-mouse/rat/human MIF Antibody

Catalog# / Size	524001 / 200 µL
Clone	Poly5240
Regulatory Status	RUO
Other Names	Macrophage migration inhibitory factor (MMIF), Glycosylation inhibiting factor (GIF), GLIF, Phenylpyruvate Tautomerase, L-Dopachrome Tautomerase, L-Dopachrome Isomerase
Isotype	Goat Polyclonal IgG
Description	MIF (human macrophage migration inhibitory factor) is a non-glycosylated polypeptide expressed by multiple cell types, which include activated T cells, macrophages, eosinophils, epithelial cells, and endothelial cells. It is secreted by response to diverse inflammatory stimuli, and has been associated with a clear pro-inflammatory and proatherogenic role in multiple studies involving patients and animals. MIF also positively correlates with obesity as well as insulin resistance and contributes to adipose tissue inflammation by modulating ATM functions. Furthermore, MIF has been described as a protein that plays an essential role in both innate and acquired immunity.

Product Details

Reactivity	Mouse, Rat, Human
Antibody Type	Polyclonal
Host Species	Goat
Immunogen	Purified recombinant mouse MIF (AA: Pro2-Ala115) expressed in <i>E. coli</i> (Cat# 599504).
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 50% glycerol.
Preparation	The antibody was purified by affinity chromatography.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	Upon receipt, store undiluted at -20°C.
Application	WB - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by Western blotting . For Western blotting, the suggested use of this reagent is 5.0 - 10.0 µl per 5 ml antibody dilution buffer for each mini-gel. It is recommended that the reagent be titrated for optimal performance for each application.
RRID	AB_2562323 (BioLegend Cat. No. 524001)

Antigen Details

Structure	115 amino acids with a predicted molecular weight of approximately 12.5 kD.
Distribution	Activated T-cells, macrophages, eosinophils, epithelial cells, and endothelial cells.
Function	MIF has been associated with a clear pro-inflammatory and proatherogenic role in cardiovascular diseases. MIF also plays important roles in adipose tissue inflammation and innate and acquired immunity.
Interaction	Monocytes and macrophages, mesenchymal cells, and B-cells.
Ligand/Receptor	CD44/CD74, CXCR4, CXCR2, and CXCR7.
Cell Type	Endothelial cells, Eosinophils, Epithelial cells, Macrophages, T cells

Biology Area

Angiogenesis, Apoptosis/Tumor Suppressors/Cell Death, Cell Biology, Cell Cycle/DNA Replication, Immunology, Innate Immunity, Signal Transduction

Molecular Family

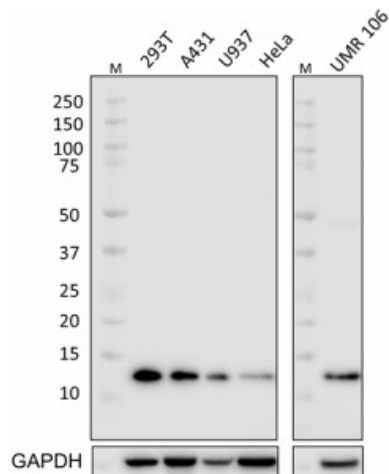
Cytokines/Chemokines

Antigen References

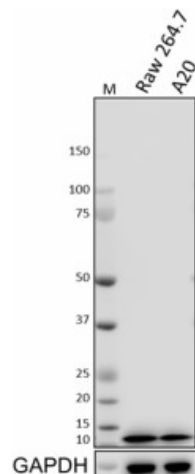
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2. Potalicchio I, *et al.* 2003. *J. Biol. Chem.* 278:30889.
3. Meyer-Siegler K and Iczkowski K. 2005. *BMC Cancer* 5:73.
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6. Kim BS, *et al.* 2015. *Exp. Mol. Med.* 47:e161.
7. Sanchez-Zamora YI, *et al.* 2014. *J. Diabetes Res.* 2014:804519.
8. Gilliver SC, *et al.* 2011. *Exp. Dermatol.* 20:1.
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Gene ID[17319](#)**Related Protocols**[Western Blotting Protocol](#)**Other Formats**

Purified anti-mouse/rat/human MIF, Biotin anti-mouse/rat/human MIF

Product Data

Total cell lysates (15 µg total protein) from 293T, A431, U937 (reduced expression control), HeLa (reduced expression control), and UMR106 cells were resolved by 4-12% Bis-Tris gel electrophoresis, transferred to a nitrocellulose membrane, and probed with 1:500 diluted Purified anti-MIF Antibody, clone Poly5240, overnight at 4°C. Proteins were visualized by chemiluminescence detection using donkey anti-goat IgG Antibody at a 1:3000 dilution. Direct-Blot™ HRP anti-GAPDH Antibody (Cat. No. 607904) was used as a loading control at a 1:50000 dilution (lower). Lane M: Molecular Weight marker. Cell lysates were loaded in order of decreasing MIF mRNA expression levels (source: Human Protein Atlas).



Total cell lysates (15 µg total protein) from Raw 264.7 and A20 cells were resolved by 4-12% Bis-Tris gel electrophoresis, transferred to a nitrocellulose membrane, and probed with 1:1000 diluted Purified anti-MIF Antibody, clone Poly5240, overnight at 4°C. Proteins were visualized by chemiluminescence detection using donkey anti-goat IgG antibody at a 1:3000 dilution. Direct-Blot™ HRP anti-GAPDH Antibody (Cat. No. 607904) was used as a loading control at a 1:50000 dilution (lower). Lane M: Molecular Weight marker.

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