

Anti-MIF Antibody
Catalog # ABO12705**Specification**

Anti-MIF Antibody - Product Information

Application	WB, E
Primary Accession	P14174
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Macrophage migration inhibitory factor(MIF) detection. Tested with WB, ELISA in Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-MIF Antibody - Additional Information

Gene ID 4282

Other Names

Macrophage migration inhibitory factor, MIF, 5.3.2.1, Glycosylation-inhibiting factor, GIF, L-dopachrome isomerase, L-dopachrome tautomerase, 5.3.3.12, Phenylpyruvate tautomerase, MIF, GLIF, MMIF

Calculated MW

12476 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, -
ELISA , 0.1-0.5 µg/ml, Human

Subcellular Localization

Secreted. Cytoplasm. Does not have a cleavable signal sequence and is secreted via a specialized, non- classical pathway. Secreted by macrophages upon stimulation by bacterial lipopolysaccharide (LPS), or by M.tuberculosis antigens.

Protein Name

Macrophage migration inhibitory factor

Contents

Each vial contains 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃. Carrier free (No BSA) form available in stock. If you want this antibody carrier free please specify "Carrier Free" or "No BSA" in your order note. "

Immunogen

E. coli-derived human MIF recombinant protein(Position: M1-A115).

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the MIF family.

Anti-MIF Antibody - Protein Information

Name MIF {ECO:0000303|PubMed:2552447, ECO:0000312|HGNC:HGNC:7097}

Function

Pro-inflammatory cytokine involved in the innate immune response to bacterial pathogens (PubMed: 15908412, PubMed: 17443469, PubMed: 23776208). The expression of MIF at sites of inflammation suggests a role as mediator in regulating the function of macrophages in host defense (PubMed: 15908412, PubMed: 17443469, PubMed: 23776208). Counteracts the anti-inflammatory activity of glucocorticoids (PubMed: 15908412, PubMed: 17443469, PubMed: 23776208). Has phenylpyruvate tautomerase and dopachrome tautomerase activity (in vitro), but the physiological substrate is not known (PubMed: 11439086, PubMed: 17526494). It is not clear whether the tautomerase activity has any physiological relevance, and whether it is important for cytokine activity (PubMed: 11439086, PubMed: 17526494).

Cellular Location

Secreted. Cytoplasm. Note=Does not have a cleavable signal sequence and is secreted via a specialized, non-classical pathway Secreted by macrophages upon stimulation by bacterial lipopolysaccharide (LPS), or by M.tuberculosis antigens

Anti-MIF Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-MIF Antibody - Images



Figure. Western blot analysis of MIF using anti- MIF antibody (ABO12705). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane : Recombinant Human MIF Protein 0.5ng. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- MIF antigen affinity purified polyclonal antibody (Catalog # ABO12705) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for MIF at approximately 12KD. The expected band size for MIF is at 12KD.

Anti-MIF Antibody - Background

Macrophage migration inhibitory factor, MIF, is a cytokine released by T-lymphocytes, macrophages, and the pituitary gland that serves to integrate peripheral and central inflammatory responses. MIF gene has 3 exons separated by introns of only 189 and 95 bp, and covers less than 1kb. Localization of the human gene for macrophage migration inhibitory factor(MIF) to chromosome 22q11.2. MIF plays a critical role in inflammatory diseases and atherogenesis.