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Anti-MIF Antibody

Catalog # ABO12705

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.

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
Application Details	Western blot, 0.1-0.5 □g/ml, Human, - ELISA , 0.1-0.5 □g/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.
Source	Eukaryota
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 r˚Constitution, 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.

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

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.

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 0.5ngAfter 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 □¼g/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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.