10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MIF, Biotinylated

Peptide-affinity purified goat antibody
Catalog # AF1672b

Product Information

Application	WB, Pep-ELISA
Primary Accession	P14174
Other Accession	NP_002406, 4282
Reactivity	Human
Predicted	Mouse, Rat
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Clone Names	EB06765
Calculated MW	12476

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
Dilution	WB~~1:1000 Pep-ELISA~~N/A
Format	0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MIF, Biotinylated is for research use only and not for use in diagnostic or therapeutic procedures.

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

This gene encodes a lymphokine involved in cell-mediated immunity, immunoregulation, and inflammation. It plays a role in the regulation of macrophage function in host defense through the suppression of anti-inflammatory effects of glucocorticoids. This lymphokine and the JAB1 protein form a complex in the cytosol near the peripheral plasma membrane, which may indicate an additional role in integrin signaling pathways.

References

A genetic association study of maternal and fetal candidate genes that predispose to preterm prelabor rupture of membranes (PROM). Romero R, et al. Am J Obstet Gynecol, 2010 Jul 29. PMID 20673868.
Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.
Association between functional promoter polymorphisms of macrophage migration inhibitory factor (MIF) gene and ulcerative colitis in Japan. Shiroeda H, et al. Cytokine, 2010 Aug. PMID 20621719.
Polymorphisms of the macrophage migration inhibitory factor gene in a UK population with Type 1 diabetes mellitus. Martin RJ, et al. Diabet Med, 2010 Feb. PMID 20546256.
Allosteric inhibition of macrophage migration inhibitory factor revealed by ibudilast. Cho Y, et al. Proc Natl Acad Sci U S A, 2010 Jun 22. PMID 20534506.

Images



Biotinylated EB06765 (0.2 µg/ml) staining of Daudi lysate (35 µg protein in RIPA buffer), exactly mirroring its parental non-biotinylated product. Primary incubation was 1 hour. Detected by chemiluminescence, using streptavidin-HRP and using NAP blocker as

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