

MIF, Biotinylated

Peptide-affinity purified goat antibody Catalog # AF1672b

Product Information

Application WB, Pep-ELISA

Primary Accession P14174

Other Accession <u>NP_002406</u>, <u>4282</u>

Reactivity
Predicted
Mouse, Rat
Host
Goat
Clonality
Polyclonal
Isotype
IgG
Clone Names
EB06765
Calculated MW
Human
Mouse, Rat
Boat
Boat
Boat
Clonal
IgG
LIGG
Boat
LIGG

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:<u>23776208</u>). The expression of MIF at sites of inflammation suggests a role as mediator in regulating the function of macrophages in host defense (PubMed:<u>15908412</u>, PubMed:<u>17443469</u>, PubMed:<u>23776208</u>). Counteracts the

anti-inflammatory activity of glucocorticoids (PubMed: 15908412,

PubMed:<u>17443469</u>, PubMed:<u>23776208</u>). Has phenylpyruvate tautomerase and dopachrome tautomerase activity (in vitro), but the physiological substrate is not known (PubMed:<u>11439086</u>, PubMed:<u>17526494</u>). It is not clear whether the tautomerase activity has any physiological relevance, and whether it is important for cytokine activity (PubMed:<u>11439086</u>, PubMed:<u>17526494</u>).

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

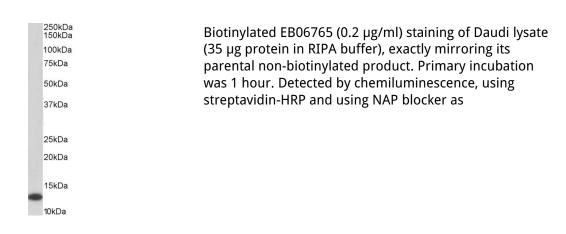
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Association between functional promoter polymorphisms of macrophage migration inhibitory factor (MIF) gene and ulcerative colitis in Japan. Shiroeda H, et al. Cytokine, 2010 Aug. PMID 20621719.

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



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