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Datasheet for 200-901-457

MIF Antibody

Overview

Description:	Anti-Macrophage migration inhibitory factor (MIF) (CHICKEN) Antibody - 200-901-457
Item No.:	200-901-457
Size:	500 µg
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Chicken

Product Details

Background:	Macrophage migration inhibitory factor (MIF) is a pro-inflammatory cytokine. It is involved in the innate immune response to bacterial pathogens. The expression of MIF at sites of inflammation suggests a role as mediator in regulating the function of macrophages in host defense. It counteracts the anti-inflammatory activity of glucocorticoids. MIF has phenylpyruvate tautomerase and dopachrome tautomerase activity (in vitro), but the physiological substrate is not known. It is not clear whether the tautomerase activity has any physiological relevance, and whether it is important for cytokine activity.
Synonyms:	chicken Anti-Macrophage migration inhibitory factor antibody, chicken Anti-MIF antibody, Phenylpyruvate tautomerase antibody, GIF antibody, GLIF antibody, Glycosylation inhibiting factor antibody, Macrophage migration inhibitory factor antibody, MIF protein antibody
Host Species:	Chicken
Clonality:	Polyclonal
Format:	IgY

Target Details

Gene Name:	MIF
Reactivity:	Human
Immunogen Type:	Conjugated Peptide

Immunogen:	This IgY fraction antibody was prepared from eggs of chickens laid after repeated immunizations with a synthetic peptide corresponding to aa 2-32 of Human MIF conjugated to keyhole limpet hemocyanin (KLH). MIF is a proinflammatory cytokine that plays an important role in systemic inflammatory events.
Purity/Specificity:	This product is an IgY fraction antibody purified from monospecific chicken egg yolks by a multi-step process which includes selective precipitation and salt fractionation followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Chicken Serum. The antibody is directed against the 12,300 MW human MIF protein and is useful in determining its presence in various assays. If neutralization experiments are performed for human MIF activity in bioassays, it is recommended to incubate the sample with a 1:500 dilution of the antibody for at least 4 hours before being tested. A control of similarly diluted normal chicken IgG is recommended. If FACS analysis experiments are performed for human MIF caution should be exhibited as the Fc domain of the chicken IgG molecule may interact with cells non-specifically.
Relevant Links:	• NCBI - P14174.4 • UniProtKB - P14174 • GeneID - 4282

Application Details

Tested Applications:	ELISA, WB
Application Note:	This IgY fraction antibody of anti-Human macrophage migration inhibitory factor (MIF) has been tested for use in ELISA and immunoblotting. Although not tested, this antibody may also be useful for neutralization assays, immunohistochemistry and flow cytometry. The antibody recognizes 12,300 MW mature human MIF. The MIF gene encodes a protein of 115 aa. The initiating methionine is cleaved leaving a mature protein of 114 aa. Reactivity in other immunoassays is unknown.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:1,000 - 1:5,000
WB:	1:500 - 1:2,000

Formulation

Physical State:	Lyophilized
Concentration:	5.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide

Stabilizer:	None
Reconstitution Volume:	500 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images

Western Blot
Western blot analysis of ROCKLAND Immunochemical's IgY fraction of Chicken anti-Human MIF polyclonal antibody. Lane 2 shows the detection of 100 ng of recombinant MIF present with a single band at 12.3 kDa. Similar detection of MIF will occur when human serum is analyzed. In lane 1 no reaction is observed in the control. A 4-20% gradient gel was used to separate the proteins by SDS-PAGE. The protein was transferred to nitro-cellulose using standard methods. After blocking the membrane was probed with the primary antibody for 1 h at room temperature followed by washes and reaction with a 1:5,000 dilution of IRDye™800 conjugated Gt-a-Chicken Rabbit IgG [H&L] (code 603-132-126) for 1 h at room temperature. LICOR's Odyssey® Infrared Imaging System was used to scan and process the image. Other detection systems will yield similar results.

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