

## Product datasheet

# Recombinant mouse MIF protein (Active) ab219128

[2 Images](#)

### Description

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<b>Product name</b>	Recombinant mouse MIF protein (Active)	
<b>Biological activity</b>	The activity is determined by its ability to activate MAP Kinase signaling (via ERK) and is detectable starting at 10 ng/ml. This corresponds to an expected specific activity of $1 \times 10^5$ units/mg.	
<b>Purity</b>	> 95 % SDS-PAGE. Purity determined by reducing and non-reducing SDS-PAGE.	
<b>Endotoxin level</b>	< 0.050 Eu/ $\mu$ g	
<b>Expression system</b>	Escherichia coli	
<b>Accession</b>	<a href="#">P34884</a>	
<b>Protein length</b>	Full length protein	
<b>Animal free</b>	No	
<b>Nature</b>	Recombinant	
<b>Species</b>	Mouse	
<b>Sequence</b>	MPMFIVNTNVPRASVPEGFLSELTQQLAQATGKPAQYIAV HVVPDQLMTF SGTNDPCALCSLHSIGKIGGAQNRNYSKLLCGLLSDRLHIS PDRVYINY DMNAANV/GWNGSTFA	
<b>Predicted molecular weight</b>	13 kDa	
<b>Amino acids</b>	1 to 115	
<b>Additional sequence information</b>	Non-glycosylated.	

### Specifications

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Our [Abpromise guarantee](#) covers the use of **ab219128** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>Applications</b>	SDS-PAGE Functional Studies
<b>Form</b>	Lyophilized

### Preparation and Storage

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**Stability and Storage**

Shipped at 4°C. Store at -20°C. Avoid freeze / thaw cycle.

Constituent: 0.16% Sodium phosphate

Lyophilised from a sterile filtered solution.

This product is an active protein and may elicit a biological response in vivo, handle with caution.

**Reconstitution**

Centrifuge vial before opening. Reconstitute with sterile water at 0.1 mg/ml. Suspend the product by gently pipetting the above recommended solution down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution. The product works best when used fresh after reconstitution. For prolonged storage, dilute to working aliquots in a 0.1% BSA solution, store at -80°C and avoid repeat freeze thaws.

**General Info**

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**Function**

Pro-inflammatory cytokine. 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. Counteracts the anti-inflammatory activity of glucocorticoids. 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.

**Involvement in disease**

Genetic variations in MIF are associated with susceptibility to rheumatoid arthritis systemic juvenile (RASJ) [MIM:604302]. An inflammatory articular disorder with systemic-onset beginning before the age of 16. It represents a subgroup of juvenile arthritis associated with severe extraarticular features and occasionally fatal complications. During active phases of the disorder, patients display a typical daily spiking fever, an evanescent macular rash, lymphadenopathy, hepatosplenomegaly, serositis, myalgia and arthritis.

**Sequence similarities**

Belongs to the MIF family.

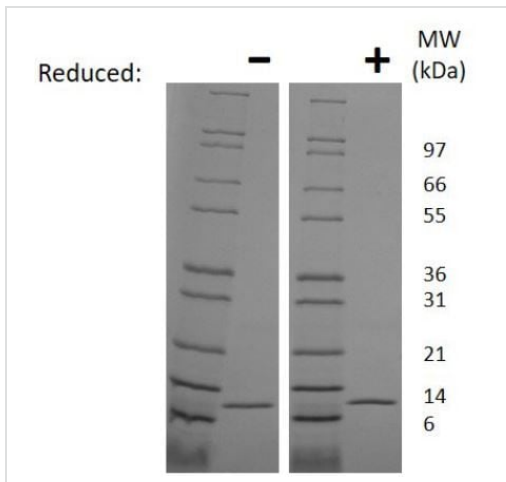
**Cellular localization**

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.

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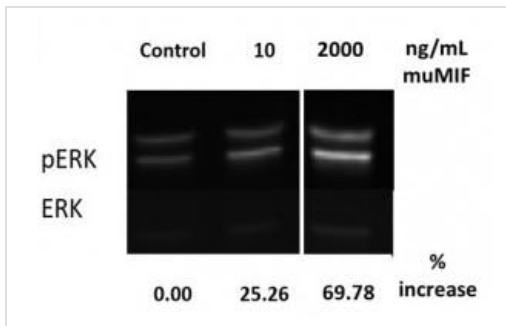
**Images**

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SDS PAGE analysis of ab219128 under non-reducing (-) and reducing (+) conditions. Stained with Coomassie Blue.

SDS-PAGE - Recombinant mouse MIF protein (Active) (ab219128)



pERK induction in RAW 264.7 cells by ab219128.

Functional Studies - Recombinant mouse MIF protein (Active) (ab219128)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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