


Product datasheet

Anti-MIF antibody [EPR12462] ab176565

KO VALIDATED Recombinant RabMAB

★★★★★ 2 Abreviews 1 References 4 Images

Overview

Product name	Anti-MIF antibody [EPR12462]
Description	Rabbit monoclonal [EPR12462] to MIF
Host species	Rabbit
Tested applications	Suitable for: WB, IP
Species reactivity	Reacts with: Human Predicted to work with: Sheep, Chicken, Cow, Cynomolgus monkey, Rhesus monkey 
Immunogen	Synthetic peptide within Human MIF aa 1-100 (Cysteine residue). The exact sequence is proprietary. Database link: P14174
Positive control	Y79, Jurkat, A375 and THP1 cell lysates.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here . Our RabMAB [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAB[®] patents . We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team. Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer

pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant

Purity

Tissue culture supernatant

Clonality

Monoclonal

Clone number

EPR12462

Isotype

IgG

Applications**The Abpromise guarantee**

Our [Abpromise guarantee](#) covers the use of ab176565 in the following tested applications.

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

Application	Abreviews	Notes
WB	★★★★★ (1)	1/1000 - 1/10000. Predicted molecular weight: 12 kDa.
IP		1/10 - 1/100.

Target**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.

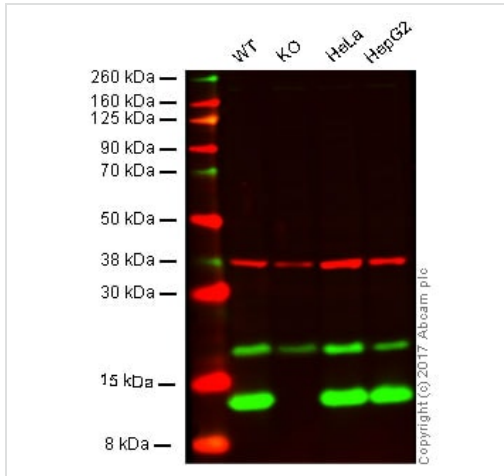
Sequence similarities

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.

Images



Western blot - Anti-MIF antibody [EPR12462]
(ab176565)

Lane 1: Wild-type HAP1 whole cell lysate (20 µg)

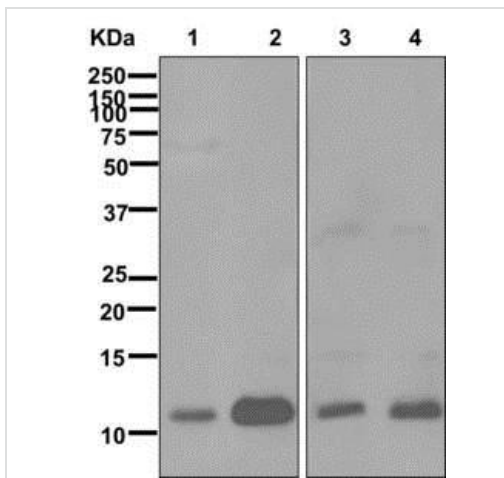
Lane 2: MIF knockout HAP1 whole cell lysate (20 µg)

Lane 3: HeLa whole cell lysate (20 µg)

Lane 4: HepG2 whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab176565 observed at 12 kDa. Red - loading control, ab9484, observed at 37 kDa.

ab176565 was shown to specifically recognize MIF in wild-type HAP1 cells along with additional cross reactive bands. No band was observed when knockout cells were examined. Wild-type and MIF knockout samples were subjected to SDS-PAGE. Ab176565 and ab9484 (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20,000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (ab216776) secondary antibodies at 1/20,000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-MIF antibody [EPR12462]
(ab176565)

All lanes : Anti-MIF antibody [EPR12462] (ab176565) at 1/1000 dilution

Lane 1 : Y79 cell lysate

Lane 2 : Jurkat cell lysate

Lane 3 : A375 cell lysate

Lane 4 : THP1 cell lysate

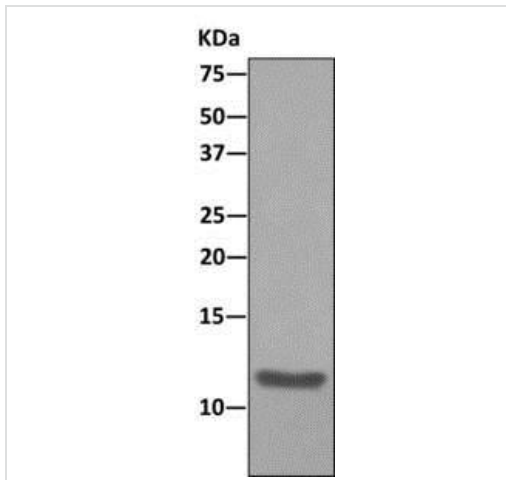
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat anti-rabbit HRP at 1/2000 dilution

Developed using the ECL technique.




Predicted band size: 12 kDa



Western blot analysis on immunoprecipitation pellet from Jurkat cell lysate labeling MIF with ab176565 at 1/10 dilution.

Immunoprecipitation - Anti-MIF antibody [EPR12462] (ab176565)

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-MIF antibody [EPR12462] (ab176565)

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