

## Product datasheet

# Recombinant Human MDA5 protein ab112423

1 Image

### Description

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<b>Product name</b>	Recombinant Human MDA5 protein
<b>Expression system</b>	Wheat germ
<b>Accession</b>	<u><b>Q9BYX4</b></u>
<b>Protein length</b>	Protein fragment
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Human
<b>Sequence</b>	HVNMTPFEFKELYVRENKALQKKCADYQINGEICKCGQAW GTMMVHKGL DLPCLKIRNFVVVFKNNSTKKQYKKWVLPITFPNLDYSEC CLFSD
<b>Predicted molecular weight</b>	36 kDa including tags
<b>Amino acids</b>	928 to 1023

### Specifications

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Our **Abpromise guarantee** covers the use of **ab112423** 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 ELISA Western blot
<b>Form</b>	Liquid

### Preparation and Storage

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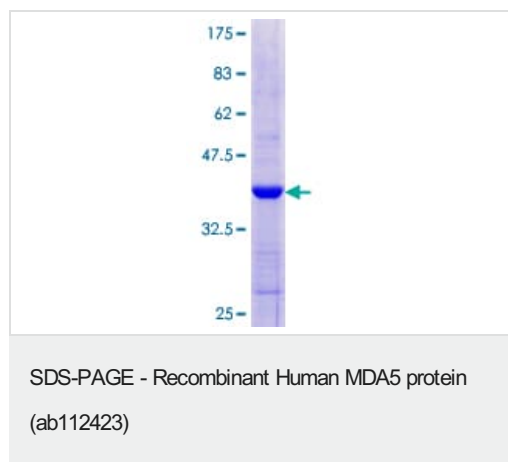
<b>Stability and Storage</b>	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl
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### General Info

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<b>Function</b>	RNA helicase that, through its ATP-dependent unwinding of RNA, may function to promote message degradation by specific RNases. Seems to have growth suppressive properties. Involved in innate immune defense against viruses. Upon interaction with intracellular dsRNA produced during viral replication, triggers a transduction cascade involving MAVS/IPS1, which results in the activation of NF-kappa-B, IRF3 and IRF7 and the induction of the expression of antiviral cytokines such as IFN-beta and RANTES (CCL5). ATPase activity is specifically induced by dsRNA. Essential for the production of interferons in response to picornaviruses.
<b>Tissue specificity</b>	Widely expressed, at a low level. Expression is detected at slightly highest levels in placenta, pancreas and spleen and at barely levels in detectable brain, testis and lung.
<b>Involvement in disease</b>	Genetic variation in IFIH1 is associated with diabetes mellitus insulin-dependent type 19 (IDDM19) [MIM:610155]. A multifactorial disorder of glucose homeostasis that is characterized by susceptibility to ketoacidosis in the absence of insulin therapy. Clinical features are polydipsia, polyphagia and polyuria which result from hyperglycemia-induced osmotic diuresis and secondary thirst. These derangements result in long-term complications that affect the eyes, kidneys, nerves, and blood vessels. Note=IFIH1 is the CADM-140 autoantigen, involved in clinically amyopathic dermatomyositis (CADM). This is a chronic inflammatory disorder that shows typical skin manifestations of dermatomyositis but has no or little evidence of clinical myositis. Anti-CADM-140 antibodies appear to be specific to dermatomyositis, especially CADM. Patients with anti-CADM-140 antibodies frequently develop life-threatening acute progressive interstitial lung disease (ILD).
<b>Sequence similarities</b>	Belongs to the helicase family. Contains 2 CARD domains. Contains 1 helicase ATP-binding domain. Contains 1 helicase C-terminal domain.
<b>Post-translational modifications</b>	During apoptosis, processed into 3 cleavage products. The helicase-containing fragment, once liberated from the CARD domains, translocate from the cytoplasm to the nucleus. The processed protein significantly sensitizes cells to DNA degradation.
<b>Cellular localization</b>	Cytoplasm. Nucleus. May be found in the nucleus, during apoptosis.

## Images



ab112423 analysed on a 12.5% SDS-PAGE gel stained with Coomassie Blue.

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

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If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

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