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Rabbit Anti-MDA5 antibody

SL18740R

Product Name:	MDA5
Chinese Name:	黑色素瘤分化相关蛋白5抗体
Alias:	CADM-140 autoantigen; Clinically amyopathic dermatomyositis autoantigen 140 kDa; DEAD/H (Asp Glu Ala Asp/His) box polypeptide; DEAD/H box polypeptide; Helicard; Helicase with 2 CARD domains; Hlcd; IDDM 19; IDDM19; IFIH 1; IFIH1; IFIH1_HUMAN; Interferon induced helicase C domain containing protein 1; interferon induced with helicase C domain 1; Interferon induced with helicase C domain protein 1; Interferon-induced helicase C domain-containing protein 1; Interferon-induced with helicase C domain protein 1; MDA 5; MDA-5; Melanoma differentiation associated protein 5; Melanoma differentiation-associated gene 5; Melanoma differentiation-associated protein 5; MGC133047; Murabutide down regulated protein; Murabutide down-regulated protein; RH 116; RH116; RIG I like receptor 2; RLR 2; RNA helicase DEAD box protein 116; RNA helicase-DEAD box protein 116.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,Horse,Rabbit,Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	117kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human MDA5:901-1025/1025
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year

	when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	DEAD box proteins, characterized by the conserved motif Asp-Glu-Ala-Asp (DEAD), are putative RNA helicases. They are implicated in a number of cellular processes involving alteration of RNA secondary structure such as translation initiation, nuclear and mitochondrial splicing, and ribosome and spliceosome assembly. Based on their distribution patterns, some members of this family are believed to be involved in embryogenesis, spermatogenesis, and cellular growth and division. This gene encodes a DEAD box protein that is upregulated in response to treatment with beta-interferon and a protein kinase C-activating compound, mezerein. Irreversible reprogramming of melanomas can be achieved by treatment with both these agents; treatment with either agent alone only achieves reversible differentiation. Genetic variation in this gene is associated with diabetes mellitus insulin-dependent type 19. [provided by RefSeq, Jul 2012] **Function:** 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. **Subcellular Location:** Cytoplasm. Nucleus. May be found in the nucleus, during apoptosis. **Tissue Specificity:** 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. **Post-translational modifications:** 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. **DISEASE:** 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 fetaures 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). **Similarity:** Belongs to the helicase family. Contains 2 CARD domains. Contains 1 helicase ATP-binding domain. Contains 1 helicase C-terminal domain. **SWISS:** Q9BYX4 **Gene ID:** 64135 **Database links:** Entrez Gene: 64135 Human Entrez Gene: 71586 Mouse Omim: 606951 Human SwissProt: Q9BYX4 Human SwissProt: Q8R5F7 Mouse Unigene: 163173 Human Unigene: 136224 Mouse **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.