

# 黑色素瘤分化相关蛋白 5 抗体

产品货号: mlR18740

英文名称: MDA5

中文名称: 黑色素瘤分化相关蛋白 5 抗体

别 名: 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\_HUMAN; Interferon induced helicase C domain containing protein 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.

研究领域: 细胞生物 糖尿病 细胞分化 表观遗传学

抗体来源: Rabbit

克隆类型: Polyclonal

交叉反应: Human, Mouse, Rat, Pig, Cow, Horse, Rabbit, Sheep,

**产品应用:** ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 ICC=1:100-500 IF=1:100-500 (石蜡切片需 做抗原修复)

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.



分子量: 117kDa

细胞定位: 细胞核 细胞浆

性状: Lyophilized or Liquid

浓度: 1mg/ml

免疫原: KLH conjugated synthetic peptide derived from human MDA5:901-1025/1025

亚型: IgG

纯化方法: affinity purified by Protein A

储存液: 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件: 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

产品介绍: 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

# Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.