

MAVS Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13783b**Specification**

MAVS Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	Q7Z434
Other Accession	NP_065797.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	56528
Antigen Region	477-505

MAVS Antibody (C-term) - Additional Information**Gene ID** 57506**Other Names**

Mitochondrial antiviral-signaling protein, MAVS, CARD adapter inducing interferon beta, Cardif, Interferon beta promoter stimulator protein 1, IPS-1, Putative NF-kappa-B-activating protein 031N, Virus-induced-signaling adapter, VISA, MAVS, IPS1, KIAA1271, VISA

Target/Specificity

This MAVS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 477-505 amino acids from the C-terminal region of human MAVS.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

MAVS Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

MAVS Antibody (C-term) - Protein Information**Name** MAVS {ECO:0000303|PubMed:16125763, ECO:0000312|HGNC:HGNC:29233}

Function Adapter required for innate immune defense against viruses (PubMed:[16125763](#), PubMed:[16127453](#), PubMed:[16153868](#), PubMed:[16177806](#), PubMed:[19631370](#), PubMed:[20127681](#), PubMed:[20451243](#), PubMed:[21170385](#), PubMed:[23087404](#), PubMed:[27992402](#), PubMed:[33139700](#), PubMed:[37582970](#)). Acts downstream of DHX33, RIGI and IFIH1/MDA5, which detect intracellular dsRNA produced during viral replication, to coordinate pathways leading to the activation of NF-kappa-B, IRF3 and IRF7, and to the subsequent induction of antiviral cytokines such as IFNB and RANTES (CCL5) (PubMed:[16125763](#), PubMed:[16127453](#), PubMed:[16153868](#), PubMed:[16177806](#), PubMed:[19631370](#), PubMed:[20127681](#), PubMed:[20451243](#), PubMed:[20628368](#), PubMed:[21170385](#), PubMed:[23087404](#), PubMed:[25636800](#), PubMed:[27736772](#), PubMed:[33110251](#)). Peroxisomal and mitochondrial MAVS act sequentially to create an antiviral cellular state (PubMed:[20451243](#)). Upon viral infection, peroxisomal MAVS induces the rapid interferon-independent expression of defense factors that provide short-term protection, whereas mitochondrial MAVS activates an interferon-dependent signaling pathway with delayed kinetics, which amplifies and stabilizes the antiviral response (PubMed:[20451243](#)). May activate the same pathways following detection of extracellular dsRNA by TLR3 (PubMed:[16153868](#)). May protect cells from apoptosis (PubMed:[16125763](#)). Involved in NLRP3 inflammasome activation by mediating NLRP3 recruitment to mitochondria (PubMed:[23582325](#)).

Cellular Location

Mitochondrion outer membrane; Single-pass membrane protein. Mitochondrion. Peroxisome

Tissue Location

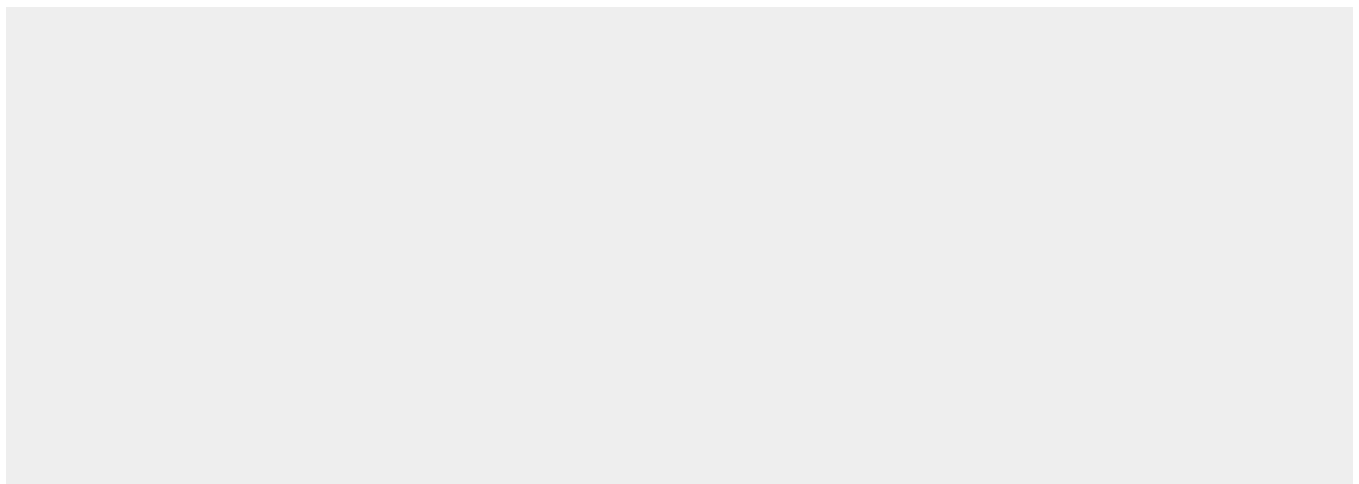
Present in T-cells, monocytes, epithelial cells and hepatocytes (at protein level). Ubiquitously expressed, with highest levels in heart, skeletal muscle, liver, placenta and peripheral blood leukocytes.

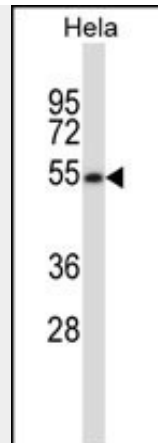
MAVS Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

MAVS Antibody (C-term) - Images





MAVS Antibody (C-term) (Cat. #AP13783b) western blot analysis in HeLa cell line lysates (35ug/lane). This demonstrates the MAVS antibody detected the MAVS protein (arrow).

MAVS Antibody (C-term) - Background

Double-stranded RNA viruses are recognized in a cell type-dependent manner by the transmembrane receptor TLR3 (MIM 603029) or by the cytoplasmic RNA helicases MDA5 (MIM 606951) and RIGI (ROBO3; MIM 608630). These interactions initiate signaling pathways that differ in their initial steps but converge in the activation of the protein kinases IKKA (CHUK; MIM 600664) and IKKB (IKKBK; MIM 603258), which activate NFκB (see MIM 164011), or TBK1 (MIM 604834) and IKKE (IKBKE; MIM 605048), which activate IRF3 (MIM 603734). Activated IRF3 and NFκB induce transcription of IFNB (IFNB1; MIM 147640). For the TLR3 pathway, the intermediary molecule before the pathways converge is the cytoplasmic protein TRIF (TICAM1; MIM 607601). For RIGI, the intermediary protein is mitochondria-bound IPS1 (Sen and Sarkar, 2005 [PubMed 16239922]).

MAVS Antibody (C-term) - References

Sebastiani, P., et al. Science (2010) In press :
Wang, X., et al. Cell. Mol. Immunol. 7(5):341-348(2010)
Graef, K.M., et al. J. Virol. 84(17):8433-8445(2010)
Wei, C., et al. J. Immunol. 185(2):1158-1168(2010)
Onoguchi, K., et al. PLoS Pathog. 6 (7), E1001012 (2010) :