10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# 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

**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:20451243, PubMed:23087404, PubMed:20127681, PubMed:21170385, PubMed:27992402, 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:20451243, PubMed:23087404, PubMed:25636800, PubMed:20127681, PubMed:21170385, PubMed:20628368, PubMed:33110251, PubMed:27736772). 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

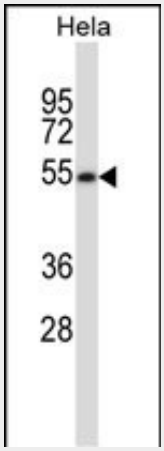
**Tissue Location**
Present in T-cells, monocytes, epithelial cells and hepatocytes (at protein level). Ubiquitously expressed, with highest levels in heart, skeletal muscle, liver, placenta and peripheral blood leukocytes.

## 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 Cytomety
- Cell Culture

## MAVS Antibody (C-term) - Images



10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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 (IKBKB; MIM 603258), which activate NFKB (see MIM 164011), or TBK1 (MIM 604834) and IKKE (IKBKE; MIM 605048), which activate IRF3 (MIM 603734). Activated IRF3 and NFKB 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) :